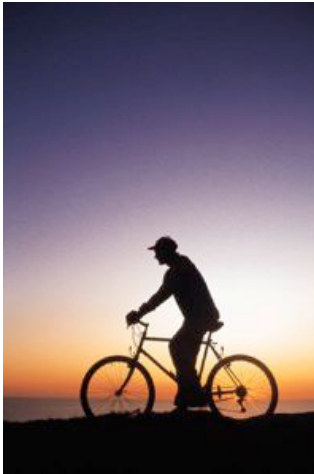




# Adopted Bicycle Master Plan

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**Prepared by:**

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**May 2011**

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## **APPENDIX A**

**City Council Adoption  
Resolution 2011-019**

## 1.0 Introduction

In 2005 the community adopted a new General Plan that fundamentally changed how the community envisions transportation. The 2005 General Plan lays out goals and policies to strengthen the range of transportation choices in order to balance automobile use, reduce its impact on the environment, and improve the livability of the City. The overarching goal of the “Our Accessible Community” section of the General Plan is stated as follows:

“Our Goal is to provide residents with more transportation choices by strengthening and balancing bicycle, pedestrian, and transit opportunities in the City and surrounding region”

In order to achieve this goal, the General Plan lays out three policies, each with their own specific action items. Several of these action items are specifically related to bicycling. The three policies, with their associated bicycle actions, are as follows:

- 4A: Ensure that the transportation system is safe and easily accessible to all travelers
  - Action: Combine education with enforcement to instill safe and courteous use of the shared public roadway
  - Action: Utilize existing roadways to meet mobility needs and only consider additional travel lanes when other alternatives are not feasible
  - Action: Design roadway improvements and facility modifications to minimize the potential for conflict between pedestrians, bicycles, and automobiles
- 4B: Help reduce dependence on the automobile
  - Action: Install roadway, transit and alternative transportation improvements along existing or planned multi-modal corridors, including primary bike and transit routes, and at land use intensity nodes.
  - Action: Prepare and periodically update a Mobility Plan that integrates a variety of travel alternatives to minimize reliance on any single mode.
  - Action: Promote the development and use of recreational trails as transportation routes to connect housing with services, entertainment, and employment.
  - Action: Develop a transportation demand management program to shift travel behavior toward alternative modes and services.
  - Action: Require new development to provide pedestrian and bicycle access and facilities as appropriate, including connected paths along the shoreline and watercourses.
  - Action: Update the General Bikeway Plan as needed to encourage bicycle use as a viable transportation alternative to the automobile and include the bikeway plan as a part of a new Mobility Plan.
  - Action: Upgrade and add bike lanes when conducting roadway maintenance as feasible.
- 4C: Increase transit efficiency and options
  - Action: Develop incentives to encourage City employees and local employers to use transit, rideshare, walk or bike.

The 2011 Ventura Bicycle Master Plan, adopted by the City Council by Resolution 2011-019 on May 2, 2011, is the enactment of General Plan Action 4.22 to update the pre-existing General Bikeway Plan. The Bicycle Master Plan is primarily a planning tool that represents the 20-year long-range bicycle plan for the City of Ventura. The Resolution is attached in Appendix A. The bicycle was historically an effective utilitarian vehicle, but with the rise in the automobile’s popularity became more recognized as a recreational vehicle. This bicycle master plan will encourage improvements to the City’s bicycle facilities infrastructure while striving to improve the use and recognition of the bicycle as a viable commuter vehicle. As the community continues to grow the City is looking for ways of reducing traffic congestion, improving air quality, and developing community-oriented transportation system infrastructure. The development of an effective bicycle facilities system within the city will be a tremendous benefit to the City’s residents, providing alternative transportation mode choices and improving the quality of life for its residents.

## 1.1 Background

The City of Ventura is situated in Southwest Ventura County, located 62 miles north of Los Angeles. It is the county seat for Ventura County. The City is connected to other regional centers by US 101, SR 126, Amtrak and Metrolink, and scheduled transit service is provided by VISTA. The major bicycle route connections through the City include the Pacific Coast Bicycle Route and the Ventura River Trail/Ojai Valley Trail. Other primary bicycle travel routes include Telegraph Road extending into Santa Paula and the Santa Clara River bridges (US 101 and Victoria Avenue) connecting into Oxnard.

Since the City's incorporation in 1866, Ventura has developed into a high quality community, integrating citizen involvement with effective planning. The City of Ventura has grown to approximately 21.1 square miles. The City's resident population was 109,343 in 2009 according to the California Department of Finance. The City's Planning Area population could increase with up to 28,200 additional residents by the Year 2025.

Approximately 1.8 million visitors enjoy the City's beaches, museums, harbor and nearby Channel Islands National Park annually. The lodging industry provides 2,000 plus rooms in 31 separate properties. Public recreation facilities include 22 parks, 3 golf courses, 4 community centers, 6 miles of beachfront, and several miles of linear parks, most of which serve as multi-use pedestrian/bicycle trails and protected natural areas. The city has spent over \$6,500,000 for bicycle facilities in the past 15 years.

## 1.2 Purpose

The purpose of the Bicycle Master Plan is to recommend bicycle facility, program, and policy oriented improvements that will best serve the community based on an assessment of existing conditions and the desires of the City's residents, thereby making Ventura more bicycle-friendly. The elements of safety, access, quality of life, and effective implementation are imperative to Ventura's success as a bicycle-friendly city.

**Safety** is the number one concern of citizens, whether they are avid or casual recreational cyclists or bicycle commuters. Residents who do not feel safe riding on the streets will simply forgo riding. For instance, The City of Portland, Oregon found in a survey that a small number (less than 1%) of the population will ride regardless of the conditions, about 10% are enthusiastic and confident, about 60% are interested but concerned, while 30% will never consider bike riding. Therefore, it is necessary to have a consistent bicycle network with bike paths, bike lanes and wider curb lanes, as well as bike route signing, in order to improve safety for all levels of bicyclists within the City. Providing support facilities such as bike racks and lockers, showering and restroom facilities, and drinking fountains are vital to the success of the network. Providing options that can capture the 60% "interested and concerned" is a key part of this plan.

**Access** to shopping, work, recreation, school, beach, harbor, and other destinations is crucial to encouraging the use of the bicycle as a viable transportation alternative. North-South access is currently constrained by limited crossings of major freeway and rail transportation corridors. Bicycle access across the major interchanges and along the arterials in the city is hampered by the sheer volume of traffic (especially during the morning and evening peak periods), even at signalized intersections. Although Gold Coast Transit and Ventura Intercity Transit Authority have implemented a Bikes-on-Buses program, efforts of this type must be continually updated to improve access and keep up with demand.

**Quality of Life** is important to all residents of the City of Ventura. Utilizing bicycles as a means of transportation reduces traffic congestion, vehicle exhaust emissions, noise, and energy consumption, creating a more sustainable environment. Furthermore, bicycling is a healthy and green activity which can be enjoyed by people of all ages. The measures suggested in this plan for improving bicycling conditions within the city will make bicycling more enjoyable for commuter and recreational bicyclists, while making bicycling more effective as a means of transportation for residents, employees, and visitors.

**Effective Implementation** of the Bicycle Master Plan improvements in a prioritized manner is imperative to the success of the plan. The components of an effective Implementation Program are education, enforcement, engineering, maintenance, and funding. Education must target bicyclists of all ages to teach the rules of the road and safe cycling, and must also target motorists to inform them of bicyclists' rights and how to share the road. Comprehensive enforcement of existing traffic and parking laws, combined with implementing approved engineering principles for bicycle networks, will make the roads safer and more bicycle-friendly. However, even the best network cannot be effective when it is not properly maintained. This plan proposes city ordinances to include bicycle support facilities as part of all new development projects. Additionally, this plan presents funding sources, which will help to make the implementation possible. And most importantly (to tie everything together), this plan recommends Institutionalizing Bicycling Considerations within all City Departments and in the community as a day-to-day key component for the plan to be successful. Elected officials, City staff, and community members must continually ask "How can I make conditions better for bicycling?" and must take action. This action must be supported through easy and effective tools to get comments, suggestions, and concerns to the right people in a timely manner.

### 1.3 Definition of Bikeways

Designated bikeways improve the safety and convenience of bicycling within the City. Effective bikeways encourage the use of bicycles as an alternative to the automobile. The bikeways discussed in this Plan include standards and designations established by the California Department of Transportation (Caltrans). Certain hybrid facilities are also designated. Each class of bikeway has its appropriate application. Detailed descriptions of each Caltrans bikeway, along with other hybrid facilities, can be found in Chapter 5 of this plan. A brief description of the Caltrans bikeways is provided as follows:

#### **Class I Bike Path:**

A Class I bike path provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

Generally, bike paths should be used to serve corridors not served by streets and highways or should be used where wide right of way exists, permitting such facilities to be constructed away from the influence of parallel streets. Bike paths should offer opportunities not provided by the road system. They can either provide a recreational opportunity, or in some instances, can serve as direct high-speed commute routes if cross flow by motor vehicles and pedestrian conflicts can be minimized. They can also serve to connect discontinuous street segments.



#### **Class II Bike Lane:**

A Class II bike lane provides a striped lane for one-way bike travel on a street or highway, and is typically designated by bike lane signs and markings.

Bike lanes are established along streets in corridors where there is significant bicycle demand, and where there are distinct needs that can be served by them. The purpose



should be to improve conditions for bicyclists in the corridors. Bike lanes are intended to delineate the right of way assigned to bicyclists and motorists, and to provide for more predictable movements by each.

**Class III Bike Route:**

A Class III bike route provides a shared use area with pedestrian traffic or motor vehicle traffic, and is typically designated with a bike route sign or specialty bike boulevard signage.

Bike routes are shared facilities, which serve either to:

- a) Provide continuity to other bicycle facilities (usually Class II);
- b) Designate preferred high demand corridors where there are physical restrictions
- c) Designate bicycle preference corridors through the implementation of a bicycle boulevard.



As with bike lanes, designation of bike routes should indicate to bicyclists that there are particular advantages to using these routes as compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists. Normally, bike routes are shared with motor vehicles. The use of sidewalks as Class III bikeways is strongly discouraged by Caltrans, but can be appropriate under certain conditions.

Recently, many agencies have been considering and implementing bicycle boulevards. These Class III facilities are meant to provide bicycle preference, while minimizing vehicular speed and throughway access.

## 2.0 Goals and Objectives

This Bicycle Master Plan serves as a comprehensive bicycle facility and program planning tool that provides recommendations to improve bicycling conditions and meet the needs of bicyclists within the City of Ventura. This plan replaces the General Bikeway Plan adopted in 2005. The goals and objectives listed in this chapter, along with policy actions presented in subsequent chapters, serve as the guidelines for the design and implementation of this plan:

**Goals** provide the contextual framework for planning and implementing the Bicycle Master Plan. Rather than provide specific details, the goals offer a long-range planning context, which guide the development of the Bicycle Master Plan.

**Objectives** provide more specific direction on how each goal should be accomplished.

**Policy actions** will be presented in subsequent chapters and will provide a bridge between the general goals and objectives and the actual implementation guidelines.

The following Goals and Objectives are intended to guide the planning, design, and implementation of bicycle facilities and programs.

### **Goal 1.0            The City will have a complete bikeway network to facilitate commuter, recreational, and utilitarian trips by bicycle**

The City recognizes that all streets and alleys, and most sidewalks, are available for biking. However, the City must also focus its efforts on providing at a minimum a connected network for safe biking. The City of Davis, California, as an example, has an extensive well-utilized bicycle network that has been proven to facilitate commuter, recreational, and utilitarian trips.



Objectives:

- 1.1 Develop a user-friendly bicycle system that meets the needs of commuter, recreational, utilitarian, and neighborhood bicyclists with varying levels of experience, skills, and abilities. These various types of cyclists will each benefit from different types of facilities.
- 1.2 Link residential, recreational, beach, commercial, educational and employment destinations by creating additional Class I, II, and III bicycle facilities to expand the existing bicycle system into a complete city bikeway network.
- 1.3 Provide links to transit hubs for other transportation modes, including bus transit centers, train stations, airports, park and ride facilities, and the harbor.
- 1.4 Integrate the local bikeway system into the regional bikeway system to provide connections to adjacent city and County bicycle networks.
- 1.5 Overcome major barriers and gaps as a priority in the development of the bikeway system. Cities with complete bikeway networks have significantly more bicyclists than those with incomplete networks.

- 1.6 Establish a named and numbered bike route system throughout the city to help current and potential bicyclists choose established, convenient routes.
- 1.7 Reduce the delay and inconvenience to bicyclists at signalized intersections by installing bicycle detection mechanisms, bicycle signal heads and/or separated bicycle signal phases.
- 1.8 Design bike routes to provide connections to and through new greenways and/or open space trail system areas.
- 1.9 Create and maintain an interim bicycle system of bike paths, lanes and routes that will serve to improve bicycle travel throughout the City prior to completion of the City's comprehensive bicycle network.
- 1.10 Provide frequent connections between Class I bike paths and the City's street system to facilitate bikeway system connectivity and increased bicycle usage.
- 1.11 Establish and maintain appropriate standards and guidelines for the design of bicycle facilities.
- 1.12 Ensure that bike lane facilities within the bikeway system are not removed to accommodate a better level of service for motor vehicles.
- 1.13 Adopt standards for the mixed use of off-street routes by bicyclists, pedestrians, equestrians, skaters and persons with disabilities.
- 1.14 Give priority to projects serving low income families and youth going to school, since these groups can often be bicycle dependant.

**Goal 2.0: The City will have bicycle support facilities to encourage increased utilization of the bikeway network.**

**Objectives:**

- 2.1 Provide appropriate bicycle facilities and equipment at transit centers and on buses and trains (or on ferries if ever implemented at the harbor).
- 2.2 Increase the amount of bicycle parking by adding bike racks and lockers in public locations and by enforcing the current city code requiring residential and commercial developments to include bicycle parking facilities.
- 2.3 Encourage secure bicycle corrals to be installed at schools and require secure bicycle corrals to be provided at large special event locations within the City.
- 2.4 Increase the number of shower and locker facilities available to bicyclists by adding them at public locations and requiring them in larger private developments.





**Goal 3.0: Maintain the bikeway system and bicycle support facilities**

Objectives:

- 3.1 Systematically document and prioritize ongoing maintenance and repair of the bikeway network and support facilities.
- 3.2 Develop standard reporting, repair, and maintenance practices to facilitate bicyclists' system accessibility, safety and comfort.
- 3.3 Provide appropriate detour routes, including appropriate signage, during any project that impacts the bikeway network.
- 3.4 Improve accessibility to, and public knowledge of existing "Bicycle Hotline" and "Pothole Hotline" phone numbers and My Ventura Access website notification system to improve and simplify access by the public. Cross-divisional and departmental coordination is key to addressing a concern in an appropriate and timely manner.



**Goal 4.0: Monitor bicycling conditions and Use of the bikeway system and prioritize appropriate improvement measure recommendations**

Objectives:

- 4.1 Monitor bicycle collisions and target needed improvements by keeping better accident records and identifying high-risk routes and intersections.
- 4.2 Provide target enforcement of bicyclist and motorist laws at critical locations. Regular enforcement of motor vehicle and bicycle laws can increase awareness and reduce potential conflicts between motorists and bicyclists on facilities that are otherwise adequate.
- 4.3 Evaluate bicycle demand indices and bicycle compatibility indices on a periodic basis, or after completing a series of improvements, to prioritize the remaining improvements needed to complete the bicycle facilities network.
- 4.4 Determine the effectiveness of the education and marketing initiatives in this plan using community surveys and evaluating bicycle collision trends.
- 4.5 Use feedback from the community as a factor in setting capital and maintenance priorities.

**Goal 5.0: Increase bicycling to promote health, recreation, tourism, and as an alternative transportation mode through educational and community outreach programs**

Objectives:

- 5.1 Partner with the School District and community advocates to provide a comprehensive education and safety programs, which target schoolchildren, adult bicyclists and motorists.





- 5.2 Produce a hard-copy paper bikeway system maps for public distribution and web-based digital bikeway system maps for public use on recognized web-based mapping systems.
- 5.3 Partner with other entities to encourage increased bicycling by promoting health, recreation, transportation, and tourist opportunities, including participation in special events and through such means as links on the City's website, brochures in hotels and other tourist destinations, and programs at local schools.

**Goal 6.0 Institutionalize bicycle facility and program planning in all aspects of the City**

Objectives:

- 6.1 Designate a bicycle coordinator position with dedicated time to oversee that the interests of the Bicycle Master Plan are implemented throughout the City's departments and department sections. This coordinator will also be responsible for training city staff and consultants to implement the Bicycle Master Plan.
- 6.2 Designate a City staff "point person" from each of the City's departments and department sections to be responsible for implementing bicycling interests of the Bicycle Master Plan within their department or department section.
- 6.3 Maximize funding opportunities from federal, state, county, and local funding programs to aid in the implementation of bicycle master plan recommendations. Work with regional transportation and air quality management agencies and local stakeholders.
- 6.4 Phase and prioritize projects by City department and department section for orderly implementation of Bicycle Master Plan recommendations. Coordinate with the capital improvement program and maintenance programs when determining the most effective order of implementation. Work with adjacent agencies on phasing of projects and maintenance efforts.
- 6.5 Institute new policies, design standards, and standard permit conditions for development or redevelopment in City planning documents to support the goals and objectives of the Bicycle Master Plan.
- 6.6 Regularly meet with an ad hoc bicycling advisory group consisting of members of the general public and City department representatives to review ongoing bicycling needs throughout the City. Community input, gained through focus groups and public workshops, is an important resource for gathering information about the bicycling needs of the community.
- 6.7 Annually review the Bicycle Master Plan and involve department representatives, City's bicycle coordinator, and ad-hoc bicycle advisory group.



## 3.0 Related Planning Considerations

This Bicycle Master Plan has been developed as a planning tool as permitted by existing legislation to coordinate and guide the provision of all bicycle-related plans, programs, and projects in the City, and to enable the City to leverage funding. The Bicycle Master Plan was also developed to be consistent with regional and local planning efforts, including internal City planning documents. Bikeway Plans from Ventura County and adjoining cities, including Oxnard, Santa Paula, and Ojai; the Southern California Association of Governments (SCAG); and Caltrans were consulted. This Bicycle Master Plan was reviewed by the City's Bicycle Focus Group (BFG) and adopted by the City Council. The regional governmental agency, the Ventura County Transportation Commission, also reviewed and approved this Bicycle Master Plan. This chapter presents a summary of relevant legislative, policy and planning documents.

### 3.1 Relevant Legislation

There are several state and federal requirements for bicycle master plans which are primarily related to funding. This Bicycle Master Plan adheres to the state and federal requirements so that the City can be eligible for funding.

#### *California Bicycle Transportation Act*

The California Bicycle Transportation Act (1994), as referenced in the California *Streets and Highways Code* Chapters 890 to 894.2, states that all cities and counties that choose to adopt a bicycle master plan must include the following items:

- (a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.
- (b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.
- (c) A map and description of existing and proposed bikeways.
- (d) A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.
- (e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.
- (f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.
- (g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.
- (h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.
- (i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.
- (j) A description of the projects proposed in the plan and a listing of their priorities for implementation.
- (k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

### *Federal Surface Transportation Policy and Planning Act of 2009*

The Federal Surface Transportation Policy and Planning Act of 2009 was the reauthorization bill of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and was the fourth bill in a line of Transportation Equity Acts (TEA). It was expected to be passed by Congress before October 1, 2009, but was not passed. Continuing extensions of the latest act have been provided in its place. Each new bill generally continues and improves upon the policy and planning framework and funding programs established under the original Intermodal Surface Transportation Equity Act (ISTEA). Each of the TEA bills has reaffirmed the need to consider bicyclists in the planning and design of roadway projects. Each bill has also enhanced bicycle facility and program funding opportunities. Caltrans has played an oversight and review role for previous Transportation Equity Act funding programs for bicycle projects and is expected to maintain a similar role with the new bill when approved. Each of the TEA bicycle funding programs requires approval of a Bicycle Master Plan with specified elements identified in the Bicycle Transportation Act in order to qualify for the program.

### **3.2 Regional Planning Documents**

Regional planning documents that could impact bicycling in the City of Ventura have been reviewed to summarize key policies, goals, and actions affecting bicycle mobility. These regional documents were obtained from Caltrans, the Southern California Association of Governments, the Air Pollution Control District, the Ventura County Transportation Commission, and Ventura County. The summaries of these documents present the extent to which the policies, goals, and actions will be coordinated with and consistent with the development of this Bicycle Master Plan.

#### *Regional Transportation Plan (2008) Non-Motorized Transportation Report*

The Southern California Association of Governments, serving as the Metropolitan Planning Organization (MPO) for Ventura County and five other counties in southern California, has adopted a regional transportation plan which contains policies relating to bicycling as part of its Non-Motorized Transportation Report. The plan's bicycling-related policies are to decrease bicyclist fatalities and injuries, increase accommodation and planning for bicyclists, increase bicycle use as an alternative to utilitarian vehicle trips, increase the amount of non-motorized transportation data gathered, include bicycling elements in all general plan updates, and to develop a Regional Non-Motorized Plan in conjunction with all counties and their cities. The Ventura Bicycle Master Plan will include the policies which are consistent with the Regional Transportation Plan.

#### *Air Pollution Control District Transportation Demand Management*

The Air Pollution Control District (APCD) has various transportation demand management (TDM) policies and regulations which are related to bicycling and provides funding for bicycle facilities. Vehicle trips and emissions from projects may be reduced if construction of bike paths, bike lanes, and/or bike parking is provided. The amount of contribution to the TDM fund for bicycle facilities considers the actual cost versus the cost following appropriate emission reduction factors. Incentives for a project to reduce vehicle trips and promote bicycle trips are desirable TDM policies that will be considered in the City's Bicycle Master Plan.

#### *Ventura County General Plan (2008)*

The transportation element of the Ventura County General Plan includes several bicycle-related goals which the Ventura Bicycle Master Plan should consider. Its goals are to "[e]ncourage the use of bicycling ... as a percentage of total employee commute trips throughout the County in order to reduce vehicular trips," and to "plan a system of bicycle lanes and trails linking all county cities, unincorporated communities, and CSUCI," through the cooperation of the Ventura County Transportation Commission and the ten cities in Ventura County. The City of Ventura Bicycle Master Plan will encourage bicycling and

provide bicycle facilities connections to adjacent cities and County areas as identified in the Ventura County General Plan.

#### *Ventura Countywide Bicycle Master Plan (2007)*

The Ventura Countywide Bicycle Master Plan, produced by the Ventura County Transportation Commission, contains a detailed inventory of bikeways, needs analysis, and specific recommendations. The plan makes recommendations to enhance and expand the existing bikeway network, make connections between gaps, address constrained areas, provide for greater local and regional activity, and encourage more residents to bicycle. This document also identifies funding sources for both infrastructure and non-infrastructure support of the bicycle network. City bicycle facilities will provide direct connections to County and adjacent city bicycle facilities.

### **3.3 Local Planning Documents**

Local planning documents that could impact bicycling in the City of Ventura have been reviewed to summarize key policies, goals, and actions affecting bicycle mobility. These local documents primarily consist of City documents. The summaries of these City documents present the extent to which the policies, goals, and actions will be coordinated with and consistent with the development of this Bicycle Master Plan.

#### *San Buenaventura General Plan Update (2005)*

The Circulation Element of the General Plan, entitled “Our Accessible Community,” contains policies related to the bicycle network and support facilities within the City’s circulation plan. Key themes of the circulation element include balancing the automobile with other means of travel, social and physical health, regional connectivity, character and quality of life, and improving design to create great places. The plan has policies to “ensure that the transportation system is safe and easily accessible to all travelers,” and “help reduce dependence on the automobile.” The Ventura Bicycle Master Plan will aim to satisfy and improve upon the policies outlined in the General Plan.

#### *City of Ventura Annual Transportation Report (2005)*

This report is intended for use in planning of future transportation improvements, including the update of the City’s Bicycle Master Plan. This document summarizes traffic-related statistics and information on traffic and transportation projects, including the Suggested Route to School program, a Capital Improvement Project to fund bicycle amenities, the State Route 126 Bike Path Gap Closure, and bike lane improvements that were implemented during 2004. Future bicycle projects mentioned in the Annual Transportation Report include the installation of bike racks and lockers along designated bike routes, the addition or enhancement of bike lanes on City streets, the construction of bike paths, implementation of a signage program to sign bike routes, and connection of stand alone bicycle facility sections to form continuous bike routes. The information has been assembled to meet the Transportation Engineering Section’s goal to improve safety and mobility for all modes of travel.

#### *Corridor and Area Planning Documents*

Various corridor and area planning documents were reviewed, and the contents of these documents will be considered in the development of the City’s Bicycle Master Plan. Summaries of the corridor and area plans are as follows:

Victoria Avenue Corridor Plan - The Victoria Avenue Corridor Plan was envisioned as part of the Ventura General Plan, and aims to eliminate auto-oriented strip development to create bikeable and walkable blocks that better serve surrounding neighborhoods. The plan considered creative solutions, including dedicated transit or streetcar lanes, wider sidewalks, and bike lanes that could transform the image of the Victoria Avenue corridor. The plan requires that new developments introduce new streets and alleys in a grid pattern to reduce block sizes, thereby enhancing mobility

for non-motorized transportation. The plan concludes with City action items to improve bicycle mobility throughout the corridor and improve multi-modal connectivity via street, bicycle, and pedestrian improvements, as recommended in the General Plan.

*Ventura Downtown Specific Plan (2007)* - The 2007 Specific Plan for Downtown Ventura is an update to the 1993 plan which focuses on “opportunity and implementation.” The plan sets forth goals, policies, and actions to enhance the public realm as called for by the 2005 Ventura General Plan. The plan identifies catalytic projects to spur economic investment and development, establishes new form-based zoning standards to direct the development, and calls for streetscape improvements, including additional bicycle parking facilities.

*Midtown Corridors Development Code: Main Street And Thompson Boulevard* - The Ventura General Plan designated the Main Street and Thompson Boulevard corridors within the Midtown Community for future evaluation and implementation action. This document aims to “ensure that development is of human scale, primarily pedestrian-oriented, and designed to create attractive streetscapes and pedestrian spaces; moderate vehicular traffic by providing for a mixture of land uses, pedestrian-oriented development, compact community form, safe and effective traffic circulation, and appropriate parking facilities; and facilitate the development and redevelopment of walkable, complete neighborhoods with a variety of housing types to serve the needs of a diverse population.” The street and streetscape standards implemented in this plan improve accommodations for bicyclists along these corridors.

*Westside Urban Design Plan* - The document reflects the outcomes from the Westside Consensus Plan (1996), which established a vision for the Westside Community. The Plan envisions new urban infill development and improved multi-modal connectivity throughout the neighborhood. Ventura Avenue is the Plan’s key focus corridor in terms of its role in pedestrian and vehicle mobility and its potential to function as a neighborhood connector or divider. The plan opposes capacity increases along Ventura Avenue to preserve historic properties and create a truly walkable and bikeable district.

*Wells-Saticoy Specific Plan* - The 2005 Ventura General Plan called for infill development in the Saticoy and Wells areas of Ventura and a community plan to prepare for this development. This plan responds to the General Plan’s goals to produce mixed-use development that places people’s daily needs within walking distance of their dwellings, resulting in reduced automobile trips and improved experiences for pedestrians and bicyclists. The plan’s bicycling-related goals include implementing an interconnected local and regional network of thoroughfares to facilitate bicycle travel.

### **3.4 Liability**

Liability is a concern for all local governments. Managing liability risk for local agencies implementing new bikeways and support facilities should be no different than the liability for new roads, parks, or schools. Local agencies should adhere to the following guidelines to minimize their liability.

#### *Use of Accepted Design Standards.*

The planning and construction of bicycle facilities should adhere to widely accepted standards governing the design and implementation of bicycle facilities. A standard of conduct includes adherence to published documents such as safety codes, standards, or guidelines that are sponsored or issued by government agencies or voluntary associations, even if adherence to these documents is not required by law. Failure to comply with mandatory provisions of state laws related to transportation facilities exposes the City to potential negligence claims.

When experimenting with new treatments that are not approved by State and/or Federal standards and guidelines follow State and Federal procedures for permission to implement and monitor these new

treatments. In California, this requires approval by the California Traffic Control Devices Committee and at the Federal level, approval by the Federal Highway Administration. Documentation of before and after conditions are important aspects of experimentation and will help assess the viability of the experimented treatment.

Chapter 1000 of the *Caltrans Highway Design Manual* contains specific bicycle facility design guidelines that must be adhered to in California. This chapter, titled “Bikeway Planning and Design,” sets the basic design parameters of on-street and off-street bicycle facilities, including mandatory design requirements.

The *California Manual of Uniform Transportation Control Devices* (California MUTCD) sets the standards for signing, signals, and other traffic control devices. Chapter 9, “Traffic Controls for Bicycle Facilities,” provides standards for bicycle traffic controls.

Chapter 1000 of the *California Highway Design Manual* (HDM) and Part 9 of the *California Manual on Uniform Traffic Control Devices* (CA MUTCD) provide both advisory and mandatory design standards and guidelines for Class I shared use paths, Class II bike lanes, and Class III bike routes. In some cases these documents provide very specific mandatory designs, such as the HDM minimum bike lane width. In other cases, these documents provide relatively vague advisory guidelines, such as the HDM description of where Class III bike routes should be located. Aside from Caltrans, the Americans with Disabilities Act (ADA) is another binding standard that affects bikeways. Class I shared use paths are most often impacted by the ADA in the requirements for barrier-free access and in maximum gradient. Other resources, such as the American Association of State Highway Officials (AASHTO) *Guide for the Development of Bicycle Facilities*, may also be used for design guidelines. While resources other than Caltrans advisory guidelines (but not mandatory standards) may be used, it is advisable to document design exceptions from Caltrans guidelines to minimize potential liability when using other resource guidelines.

#### *Traffic signals and warning devices.*

The CA MUTCD defines circumstances under which traffic signals and warning devices are warranted. California law limits the liability of public entities for failure to install regulatory traffic signals, but signage, markings, and non-regulatory warning signs must be installed where necessary to warn of dangerous conditions, such as an intersection. Signals and warning devices must be properly maintained to avoid reliance on a faulty device.

#### *Adhere to Maintenance Standards.*

Regular maintenance should occur at all bicycle facilities and should conform to recognized maintenance practices. The responsible maintenance agency(ies) should keep a written record of maintenance procedures.

#### *Monitor Conditions.*

The responsible agency(ies) should have a mechanism to monitor conditions on a bicycle facility and respond to reported problems. This is typically done through maintenance procedures, recorded field observations and public comments, and an annual incident analysis. Incidents should be reviewed to determine the factors which caused them and the analysis may warrant further investigation into mitigation measures.

#### *Keep Written Records.*

Written records of maintenance activities, procedures, and responses to reports of safety hazards should be kept for all bicycle facilities. Records should be kept in accordance with regular City Council policy and should be kept for several years.

#### *Correct Hazards.*

The City should respond to and remove reported hazards in a timely manner.

*Warn of Known Hazards.*

Every effort should be made to warn bicyclists of known hazards, such as installing signage warning of steep grades or an upcoming intersection or railroad crossing.

Trail users should be warned if a trail is adjacent to an active railroad corridor. They should also be warned to use caution when crossing the tracks or at intersections with roadways.

*Insurance.*

The City should have proper insurance coverage or budget for self-insurance to cover potential liability costs.

## 4.0 Community Needs Analysis

This chapter presents the general bicycling needs of a typical community and the specific needs of the residents of Ventura as determined by public workshops, surveys, and the Bicycle Focus Group.



### 4.1 Types of Bicyclists

A substantial variation exists in the ages, physical capabilities and riding philosophies of cyclists currently active in Ventura. There are also quite a few residents of Ventura who might begin bicycling if improved facilities are provided to increase their comfort level when bicycling. The variation in the bicycling population results in differences in both the level of expertise among riders and the types of trips that they are willing to make. The planning, design, and implementation of the bikeway system must be predicated on a capability to serve as much of this varied population as possible by providing a range of facilities to include appropriate Class I bike paths, Class II bike lanes, and Class III bike routes, along with other bicycle facilities:

#### Class I Bike Path



#### Class II Bike Lane



#### Class III Bike Route



**Bike Paths:** Provide a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

**Bike Lanes:** Provide striped lanes for one-way bike travel on each side of a street or highway.

**Bike Routes:** Provide for shared use with pedestrian or motor vehicle traffic.

Bicyclists may be classified into three different groups based on their trip purpose: commuter, recreational, tourist, utilitarian, and neighborhood cyclists. Each group possesses different skill levels and uses each type of facility to a different degree. Bicyclists can also be classified as experienced or non-experienced riders. Experienced bicyclists tend to include seasoned commuter or recreational bicyclists with the abilities to easily negotiate complex roadway and traffic situations. Non-experienced bicyclists tend to include the more casual or timid commuter or recreational bicyclists.



The needs of bicyclists will vary by their experience level. Some general observations about these needs include the following:

- The U.S. Department of Transportation identifies thresholds of traffic volumes, speeds, and curb lanes where less experienced bicyclists begin to feel uncomfortable. For example, on an arterial with traffic moving between 30 and 40 miles per hour, less experienced bicyclists would feel more comfortable riding in bike lanes while more experienced bicyclists would feel comfortable in a 14 or 15 foot wide curb lane. The Bicycle Compatibility Index, commissioned by the Federal Highway Administration Office of Safety and Traffic Operations Research and Development department, considers these and other factors to assess the bicycling compatibility, or perceived comfort level, experienced by the average adult cyclist on roadway segments.
- Casual bicyclists typically ride shorter distances than more experienced riders, may be unfamiliar with many of the rules of the road, and typically feel less comfortable riding in traffic. Some riders, especially younger riders and the elderly, may find negotiating traffic to be unsafe due to difficulty in gauging traffic speeds, responding to changing conditions, or riding quick enough to rapidly clear intersections. Many casual bicyclists, and some more experienced riders, may also be willing to sacrifice time by using lower-volume streets in order to avoid the more heavily traveled arterials.
- Experienced bicyclists are familiar with the rules of the road and are more comfortable with negotiating traffic than casual bicyclists. Experienced bicyclists generally choose to utilize the available roadway network, including streets with higher motor vehicle traffic volumes, to achieve the most direct route to their destination.

#### 4.1.1 Commuter Bicyclist Needs

According to US Census 2000 data, the percentage of bicycle commuters in Ventura was over twice the national average and slightly higher than the state average. However, bicyclists who commute to work in Ventura currently make up less than one percent of the working population. This is due, in part, to the required travel distances for the average commuter. Access to transit can help to extend the commute range of cyclists, but public transit systems also face increased difficulty in serving a more dispersed live-work pattern. Despite these facts, Ventura has a great potential to increase the number of people who ride to work or school because of (a) the size of the city, (b) its relatively flat terrain (c) moderate density residential neighborhoods near employment centers, (d) a favorable topography and climate, (e) a high percentage of work trips that are less than 15 minutes, and (f) its high number of potentially convenient bikeways.



Commuter cyclists utilize the bicycle as their means of transportation for a variety of trips, which can range from several blocks to one or more miles. Commuter cyclists typically seek the fastest, most direct route available. These routes may include arterial streets, which often entails mixing with heavy auto traffic and negotiating hazardous conditions. Commute periods usually occur at the same time as peak traffic conditions, increasing exposure to potential conflicts with vehicles. Most commuter cyclists are between the ages of 18 and 50, as commuter cycling requires the greatest degree of physical ability as well as skill.

High vehicle speeds, unprotected crosswalks, uncontrolled intersections, free right turn lanes and narrow travel lanes adjacent to parked cars, unexpected obstacles, and sudden varying roadway surfaces and widths are the primary concerns of bicycle commuters. End-of-trip facilities are of concern to commuters: secure parking facilities are an absolute necessity and shower and changing amenities also encourage bicycle commuting. Commuters with longer trips can benefit from public transit support for bicycles.

#### 4.1.2 Recreational Bicyclist Needs

The needs of recreational bicyclists in Ventura must be understood prior to developing a system or set of improvements. While it is not possible to serve every neighborhood street and every need, a good plan will integrate recreational needs to the extent possible.

Recreational cyclists and tourists ride bicycles for enjoyment or exercise or to travel to a recreational



and tourist destinations. Skill levels vary widely, from school-age children to families to touring cyclists to competitive cyclist.

Recreational cyclists may often choose to ride on separate facilities developed primarily for recreational use, such as bike trails. Recreational bicyclists prefer routes with improved safety features and minimal delays. Unlike commuter bicyclists, however, directness of the route is typically less important than routes with fewer traffic conflicts. Tourist riders prefer to ride on facilities that directly access their stay accommodations and tourist destinations.



Reduced traffic conflicts, visual interest, shade, protection from wind, moderate gradients, and other features which make the trip itself more pleasant are most important to recreational bicyclists. Additionally, cyclists who are exercising or touring generally prefer a loop route rather than having to backtrack.

#### 4.1.3 Neighborhood Bicyclist Needs

Neighborhood cyclists include individuals who use the bicycle for short trips within the immediate neighborhood to ride to school, shopping areas, a friend's house, neighborhood parks or playgrounds, etc. The cycling skills required are generally low and local or collector streets usually provide adequate routes. The majority of neighborhood cyclists are school-age children and young adults. Many younger students (ages 8-11) use sidewalks for riding to schools or parks, which may be acceptable in areas where pedestrian volumes are low and driveway visibility is high.



Where on-street parking and/or landscaping obscures visibility, sidewalk riders may be exposed to a higher incidence of conflicts. Educational programs are especially important so that younger riders can learn the rules of the road at an early age. A Safe Routes to Schools program and school route maps are also beneficial to younger students. Older students (12 years or older) who consistently ride at speeds over 10 mph should be directed to riding on-street wherever possible to promote good cycling habits.



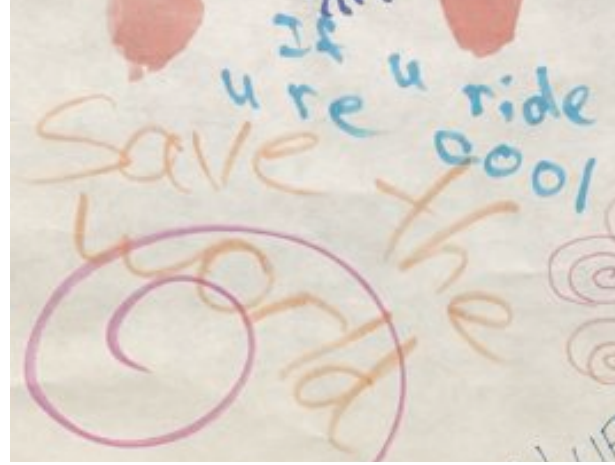
#### 4.2 Benefits of Bicycling

The bicycle is an effective means of transportation that is quiet, non-polluting, versatile, a great form of exercise and fun. Bicycling is the most energy-efficient form of transportation and is particularly well-

suited for shorter trips. It offers a low-cost means of transportation to those who do not use or have access to a motor vehicle.

#### 4.2.1 Traffic and Air Quality Benefits

One of the key goals of the Bicycle Master Plan is to increase the number of bicycle commuters in order to meet larger transportation goals to minimize traffic congestion and air pollution. Some of the terms, benefits, national statistics, and policies regarding the relationship between bicycling and traffic and air quality benefits are listed as follows:



- Mode split refers to the choice of transportation people make whether for work or non-work trips. Currently, the average household in the U.S. generates about 10 vehicle trips per day. Work trips account for less than 30% of these trips (on average).
- The latent ‘need’ for bicycle facilities in Ventura--versus actual bicyclists--is difficult to quantify; we must rely on evaluation of comparable communities to determine potential usage.
- The U.S. Department of Transportation’s “National Walking and Bicycling Study” (1995) sets the goal of doubling the current bicycle modal share by the year 2010. This goal assumes that comprehensive bicycle infrastructures and policies have already been implemented by 2010. Using population estimates, and factoring student populations that bicycle commute translates into a bicycle mode share of 1.58% or approximately 1,150 bicycle commuters.
- There is great potential for increasing the amount of bicycle commuters in Ventura. There are approximately 8,300 individuals whose commute time is nine minutes or less (see Table 3). Subtracting the amount of people who already bicycle to work, this shows an increase of approximately 7,900 potential bicycle commuters in Ventura. Based on a 10% capture rate of these individuals – this population could reduce the Vehicle Miles Traveled (VMT) by 13,000 per day, and over 3 million over the course of a year.
- The air quality benefit of future bicycle commuters is a reduction of about nine metric tons of Hydro Carbons a year, 70 metric tons of Carbon Monoxide a year, five metric tons of NOX a year, and 1,385 metric tons of Carbon Dioxide a year.
- Walking and bicycling are two of the most popular forms of recreational activity in the United States, with 84% of Americans walking for pleasure and 46% bicycling for pleasure, according to the President’s Report on Outdoor Recreation (1986). Using these percentages and based on year 2009 population estimates, it would suggest that about 91,800 residents in Ventura would like to walk for pleasure and 50,300 would like to bicycle for pleasure. If nothing else, this indicates a latent demand for facilities and a potent constituency to push for better facilities (see Table 2).

**Table 1**  
**Ventura Demand Model**

<b>Current Commuting Statistics</b>	<b>Total</b>	<b>Source</b>
Ventura Population	109,351	2008 California Department of Finance Data Extrapolated to 2009
Number of Commuters	50,763	2000 US Census Extrapolated (Employed persons minus those working at home)
Number of Bicycle to Work Commuters	448	2000 US Census Extrapolated
Number of Walk to Work Commuters	1,359	2000 US Census Extrapolated
Bicycle-to-Work Mode Share	0.88%	Mode Share Percentage of Bicycle to Work Commuters
School Children Grades K-8	15,342	2000 US Census Extrapolated, population ages 5-14
Estimated School Bicycle Commuters	368	Healthy People 2010 Mid-course review (2000) (2.4%)
Number of College Students	6,721	2000 US Census Extrapolated
Estimated College Bicycle Commuters	336	National Bicycling & Walking Study, FHWA, Case Study No. 1, 1995. Review of bicycle commute share in seven university commutes (5%)
Average Weekday Transit Ridership in Ventura	4,000	Average of weekday system wide Ventura Transit boardings on Bus Routes and Light Rail serving Ventura
Estimated Number of Daily Bike/Transit Users in Ventura	766	2000 US Census Extrapolated
Estimated Total Number of Bicycle Commuters and Utilitarian Riders	1,152	Total of bike-to-work, transit, school, college and utilitarian bicycle commuters. Does not include recreation.
Estimated Adjusted Mode Share	1.58%	Estimated Bicycle Commuters divided by work and school travelers
<b>Estimated Current Bicycle Trips</b>		
Total Daily Bicycle Trips	2,304	Total bicycle commuters x 2 (for round trips) plus total number of utilitarian bicycle trips
Reduced Vehicle Trips per Weekday	767	Assumes 73% of bicycle trips replace vehicle trips for adults/college students and 53% for school children
Reduced Vehicle Miles per Weekday	3,789	Assumes average one-way trip travel length of 4.6 miles for adults/college students and 0.5 mile for schoolchildren
<b>Potential Future Bicycle Commuters</b>		
Number of Workers with commutes 9 minutes or less	8,324	2000 US Census Extrapolated
Number of Workers who already bicycle to work	448	2000 US Census Extrapolated
Number of potential bicycle commuters	7,877	Calculated by subtracting number of workers who already bicycle from the number of workers who have commutes 9 minutes or less

Future number of new bicycle commuters	788	Based on capture rate goal of 10% of potential bicycle riders
Total Future Daily Bicycle Commuters	1,939	Current daily bicycle commuters plus future daily bicycle commuters
Future Total Daily Bicycle Trips	3,879	Total bicycle commuters x 2 (for round trips)
Future Reduced Vehicle Trips per Weekday	2,832	Assumes 73% of bicycle trips replace vehicle trips
Future Reduced Vehicle Miles per Weekday	13,025	Assumes average one-way trip travel length of 4.6 miles for adults. Assumes 12 mph average bicycle speed; 23 minute average travel time. Travel time data from NHTS 2001 Trends, Table 26.
Future Reduced Vehicle Miles per Year	3,334,524	256 weekdays per year

#### Future Air Quality Benefits

Reduced HC (kg/weekday)	36	(0.0028 kg/mile)
Reduced CO (kg/weekday)	272	(0.0209 kg/mile)
Reduced NOX (kg/weekday)	18	(0.000139 kg/mile)
Reduced CO2 (kg/weekday)	5,412	(.4155 kg/mile)
Reduced HC (metric tons/year)	9	1000 kg per metric ton; 256 weekdays/year
Reduced CO (metric tons/year)	70	1000 kg per metric ton; 256 weekdays/year
Reduced NOX (metric tons/year)	5	1000 kg per metric ton; 256 weekdays/year
Reduced CO2 (metric tons/year)	1,385	1000 kg per metric ton; 256 weekdays/year



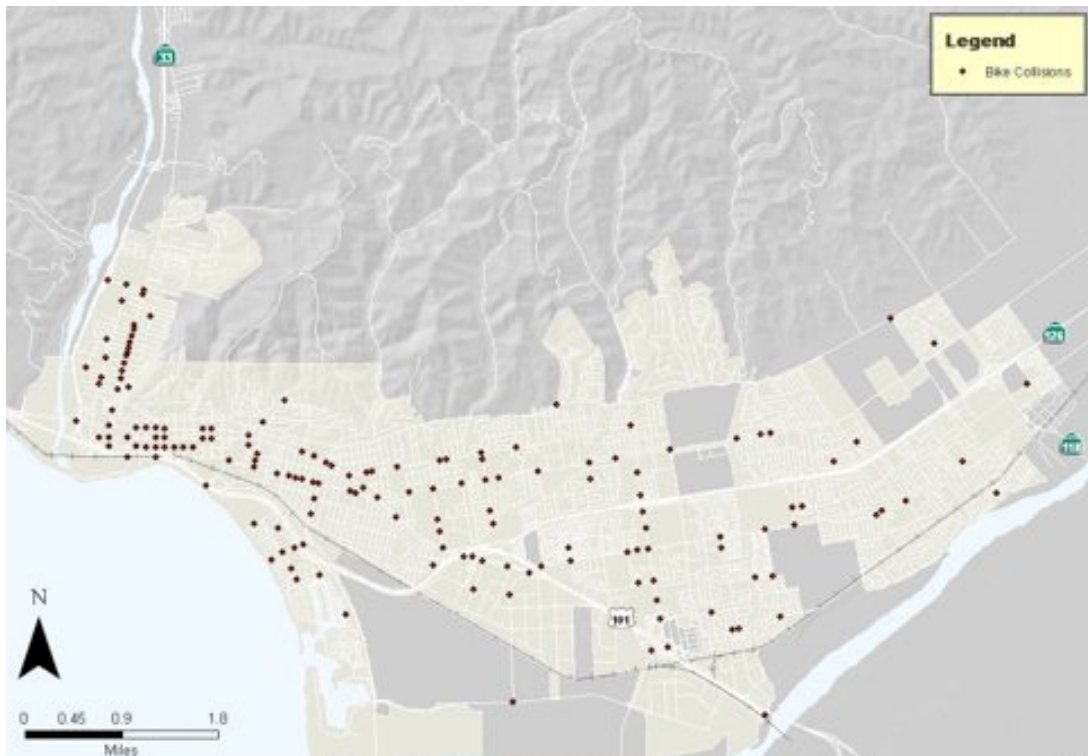
#### 4.2.2 Community Benefits

Improving the bicycling environment can also provide non-transportation-related benefits to communities. Communities benefit from bicycle riders who purchase foods and other needs locally. The tourism industry benefits as more bicycle riders are attracted from outside the county. Most importantly, the overall quality of life of communities is enhanced by the presence of bicyclists and pedestrians.

- Bicycles allow more independence for those who are unable to drive or don't have access to a motor vehicle
- Increasing the number of children as neighborhood bicyclists reduces the need for parents to "chauffeur" their children to school and other social and recreational activities around the neighborhood
- Bicycling allows households to meet their transportation needs with fewer cars
- Bicycling provides enjoyable recreational opportunities and promotes better public health

#### 4.3 Incident Analysis

Incident analysis is important in every community in determining the specific facilities which need improvements to safety. **Figure 1** is a map of bicycle related incidents in Ventura for the past 5 years.



**Figure 1: Bicycle Related Incidents in Ventura for the Past 5 Years**

Most notably, there are a high number of incidents along Ventura Avenue and along Thompson Avenue. This pattern is consistent with data gathered for the 2005 Bicycle Master Plan which used collision reports from 2000-2004. Neither Ventura Avenue nor Thompson Avenue include dedicated bike lane facilities on the segments which yielded the highest number of incidents.

## 4.4 Community Outreach

The California Bicycle Transportation Act of 1994 requires bicycle master plans to have citizen and community participation. To fulfill this component of the Act, a Bicycle Focus Group was assembled for initial input on the bicycle master plan, surveys of area residents were taken, bicycle rides around the city were conducted to assess constraint and opportunity points, and public workshops were held to gather additional insight from the community.



### 4.4.1 Bicycle Focus Group

A Bicycle Focus Group (BFG) of 14 members of the community was assembled. Members of the community, including city employees, county staff, a student, and bicyclists from local bike clubs were included in the BFG team. The BFG was given six principle tasks:

1. Review and comment on Ventura County Bicycle Master Plan
2. Identify opportunities and constraints in the existing bicycle infrastructure
3. Recommend bike facilities in the City
4. Recommend projects
5. Recommend programs
6. Recommend priorities for implementing projects and programs.

The Bicycle Focus Group came up with several recommendations:

- Improve motorist education on bike safety and bicyclists rights on the road
- Improve education of bicycle safety and rules of the road for adults and children
- Complete the Safe Routes to School routes to De Anza Middle School and Ventura High School
- Improved detection of bicyclists at signalized intersections without the use of push buttons
- Increase signing and lane markings to encourage bicyclists and motorists to “Share the Road.”

### 4.4.2 Survey Results

Residents were given two surveys in order to gather understanding into the attitudes, opinions, and behaviors of individuals who bicycle in Ventura. Over 300 people responded to the surveys, providing valuable insight into the city’s existing conditions for bicyclists. Copies of the two surveys are available in the appendix. The results and conclusions are presented below.

The survey requested respondents to identify their reasons for riding. A large percentage of respondents listed exercise and recreation as their primary reason for riding. A relatively high number also identified bicycling as a mode of transportation for work and shopping.

Reasons for Riding (percent of respondents)

Response	Percent	Total
Exercise	82.9%	204
Recreation	78.5%	193
School	15.9%	39
Work	44.3%	109
Shopping	41.1%	101

When asked how often they ride, over 65% of respondents indicated that they rode at least three days per week. This indicates that many of the respondents are frequent riders.

#### Trip Frequency

Answer Options	Response Percent	Total
Almost every day	29.6%	72
Several days a week	26.7%	65
A few days a week	17.7%	43
A few days a month	16.5%	40
A few days a year	4.9%	12
Rarely or never	4.5%	11

The survey also asked participants for the distance of their commute. Over 50% had commutes within five miles of their home, and over 70% had commutes within ten miles. This suggests that a large number of Ventura residents are within a reasonable distance to commute to their place of work by bike (in fact, according to 2000 US Census Data, 16.4% of commuters had trips of fewer than nine minutes, and 37.2% had trips of fewer than 15 minutes).

#### Average Trip Distance

Distance	Response Percent	Total
Under 2 Miles	27.7%	13
3-5 miles	27.7%	13
6-10 miles	14.9%	7
11-24 miles	23.4%	11
25 miles and above	6.4%	3

The survey asked respondents about their concerns while bicycling in the city. Residents were overwhelmingly concerned by traffic conditions over all of the other choices combined, indicating a strong need for improved bikeway facilities which would allow for fewer conflicts on busy streets. Difficulty finding good routes was also listed as a significant concern that needs to be addressed.

#### Bicycling Concerns in Ventura<sup>1</sup>

Answer Options	1	2	3	4	5	6	7	8	Total
Traffic Conditions	71	13	1	1	1	0	2	0	89
Personal Safety/Being Assaulted	1	3	5	5	3	4	5	4	30
Weather	4	5	9	8	5	10	1	1	43
Bicycle Theft	6	11	9	3	6	6	1	3	45
Potential Breakdown	4	4	9	7	7	4	2	2	39
Helmet Messes up Hair	1	0	2	2	3	1	4	9	22
Get too Sweaty	0	1	1	4	3	2	8	6	25
Difficulty Finding Good Routes	23	30	9	3	6	1	1	1	74
Others (please specify)	1	1	1	1	0	0	0	0	4

Ordered from 1 being most important to 8 being least important

<sup>1</sup> The original survey listed item number two as “Personal Safety.” A large number of respondents selected personal safety as their primary concern. When a revised survey was distributed with “Personal Safety” replaced by “Being Assaulted,” the selection of this choice was drastically reduced. This suggests that many respondents interpreted “Personal Safety” as “Safety in Traffic.” The results for this question in its original wording, as well as combined results for original and revised wording, are both available in the appendix.



Respondents were asked for comments regarding why they did not bicycle more. Many of the comments fell into one of ten different categories, shown in the chart below. The most common reason for not bicycling more was safety by a large margin, followed by lack of time. This reinforces the results in the previous Bicycling Concerns table that a lack of safe bicycling conditions is both a concern and a deterrent to cyclists in the community.

Reasons for not Riding	
Reason	Number of Responses
Safety	90
Time	56
Route Conditions	36
Distance	16
Weather	10
Convenience	9
No Bike	7
Work	5
End of Trip Facilities	5
Need Car	2
Other	21

The survey also asked respondents about their desired improvements for bicycling in Ventura. The most desired improvement was for on-street bike lanes, followed closely by off-street bike paths. This implies that improvements to the bikeway network are necessary to encourage more people to ride. A large number of respondents also indicated that they would like increased motorist education. Increasing motorist education would, ideally lead to safer motorist/cyclist interactions. Finally, a similar number of respondents listed improved bike routes signing. The responses from this survey question indicate a large desire for the city to improve the overall bikeway network (bike lanes, bike paths, and bike routes) as well as increase motorist awareness.

Desired Improvements										
Answer Options	1	2	3	4	5	6	7	8	9	Total
Off-Street Bike Trails	111	31	14	8	11	7	2	2	1	187
On-Street Bike Lanes	118	58	12	7	6	1	0	3	2	207
Bike Route Signage	43	34	40	15	16	11	6	4	1	170
Showers at Destination	10	5	2	6	7	13	10	21	24	98
Bike Lockers	16	7	8	14	19	10	12	17	10	113
Bike Racks	41	13	15	24	14	11	16	7	3	144
Bicyclist Education	30	8	19	18	15	15	16	14	3	138
Motorist Education	51	18	30	24	16	11	7	9	1	167
Bicycle Law Enforcement	29	5	12	16	21	9	8	8	23	131

Ordered from 1 being most desired to 9 being least desired improvement

In addition to filling out specific survey questions, respondents also had the opportunity to provide commentary regarding their concerns and desired improvements to the Ventura bikeway network. Some of the most frequently addressed items are summarized below.

Unsafe motorist interactions are problematic even in the presence of bicycle lanes. Improved motorist education and enforcement are needed to encourage drivers to share the road.

Bicycle routes around the city are incomplete. More bicycle lanes and paths are of primary importance, but signed routes are also needed where other bicycle facilities are not feasible. Better maintenance is needed on many existing routes as debris and potholes contribute to unsafe riding conditions.

Secure parking facilities are needed to make cycling a viable option for commuter trips. Shower and changing facilities were also requested by some respondents.

Better integration with public transit is needed. Busses aren't equipped with enough bike racks and they are currently difficult to use.

#### **4.4.3 Bicycle Focus Group City Rides**

The members of the Bicycle Focus Group conducted rides around the City in order to identify constraint and opportunity points in Ventura.



After conducting these rides and assessing the conditions of the bicycle system in Ventura, the members of the BFG came up with several recommendations for the bikeway network:

- Safe, contiguous Class II bike lanes along:
  - Mills Road
  - Telegraph Road from the intersection at Main Street to Victoria
  - The full length of Victoria Avenue, connecting to the Metro Station
- Class III bicycle routes:
  - Implement an East-West route on the North side of SR 126 along Foothill or Telegraph
  - Implement an East-West route on the South side of SR 126
  - Implement a complete North-South route along Victoria (or further east) to connect to Camarillo/Oxnard
  - Implement a complete North-South route along Harbor or Victoria to connect to Oxnard/Port Hueneme

#### 4.4.4 Public Workshops

Public workshops were conducted as part of the production of this bicycle master plan. This consisted of an initial series of three workshops held on August 9, August 29, and September 8, 2007 and served as a preliminary information-gathering workshop during the planning phase of the bicycle master plan.

Some of the major concerns gathered during the public workshops are listed below:

- The bikeway system needs better connections across the freeways
- The bikeway system has gaps, both North-South and East-West, that need to be completed
- Education needs to be improved in schools, for motorists, and for bicyclists
- Better routes to school are needed for the schools in Ventura, especially around De Anza Middle School and Ventura High School

After analyzing the Constraints and Opportunities Maps distributed at the Midtown Community Meeting, the Bicycle Focus Group determined that the consistently identified needs generally include the following:

- Improved access from the Midtown area to the beach
- Improved conditions along Seaward Avenue
- Complete bicycle arteries running east-west (and to a lesser extent north-south) in the city
- Improved bicyclist education
- Improved access to De Anza Middle School



A second series of public workshops was conducted in the spring and summer of 2010 following an extensive review of the physical characteristics associated with the opportunity and constraint areas throughout the city. This second series of public workshops was held to present the bicycle master plan to the public and make adjustments to the plan based on public input. Community input was also obtained and incorporated into the plan through comments received at the Planning Commission and Parks and Recreation Commission meetings in February of 2011, and at the City Council meeting in March of 2011.

## 5.0 Existing Conditions

This existing conditions section of the bicycle master plan provides the overall framework of the base bicycle network conditions within the City of Ventura at the beginning of the bicycle master plan update process.

### 5.1 Definition of Bikeways

Designated bikeways improve the safety and convenience of bicycling within the City. Effective bikeways encourage the use of bicycles as an alternative to the automobile. The bikeways in this Plan include standards and designations established by the California Department of Transportation (Caltrans). Certain hybrid facilities are also designated. Each class of bikeway has its appropriate application. Detailed descriptions of each Caltrans bikeway and its applications can be found in Chapter 1000 of the California *Highway Design Manual* (HDM), which contains bikeway design guidelines (See Appendix). Descriptions of the Caltrans bikeways and other hybrid facilities are listed as follows:

**Class I Bike Path:** A Class I bike path provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow by motorists minimized.

Generally, bike paths should be used to serve corridors not served by streets and highways or should be used where wide right of way exists, permitting such facilities to be constructed away from the influence of parallel streets. Bike paths should offer opportunities not provided by the road system. They can either provide a recreational opportunity, or in some instances, can serve as direct high-speed commute routes if cross flow by motor vehicles and pedestrian conflicts can be minimized. They can also serve to connect discontinuous street segments.



**Class II Bike Lane:** A Class II bike lane provides a striped lane for one-way bike travel on a street or highway, and is typically designated by bike lane signs and markings.

Bike lanes are established along streets in corridors where there is significant bicycle demand, and where there are distinct needs that can be served by them. The purpose should be to improve conditions for bicyclists in the corridors. Bike lanes are intended to delineate the right of way assigned to bicyclists and motorists, and to provide for more predictable movements by each.



**Class III Bike Route:** A Class III bike route provides a shared use area with pedestrian traffic or motor vehicle traffic, and is typically designated with a bike route sign.

Bike routes are shared facilities which serve either to:

- Provide continuity to bicycle facilities (usually Class II); or
- Designate preferred high demand corridors.



As with bike lanes, designation of bike routes should indicate to bicyclists that there are particular advantages to using these routes as compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists. Normally, bike routes are shared with motor vehicles. The use of sidewalks as Class III bikeways is strongly discouraged by Caltrans, but can be appropriate under certain conditions.



**Shoulder Bike Route:** A significant amount of bicycle travel (in fact most bicycle travel in the State) now occurs on streets and highways without bikeway designations. Many roadways that are not fully improved with curb, gutter and sidewalk are nevertheless used by bicyclists for commuter and recreational travel. It may sometimes be inappropriate to designate these roadways as Class II bike lane facilities because of the limited use and lack of continuity with other bike routes. However, the development and maintenance of minimum 4-foot paved roadway shoulders with a standard 4 inch edge line can significantly improve the safety and convenience for bicyclists and motorists along such routes.



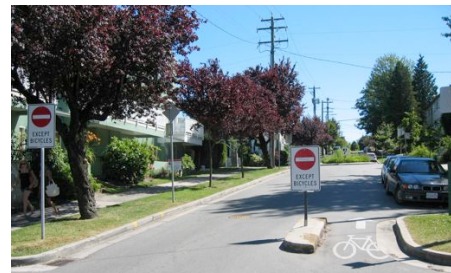
**Shared Lane Marking:** Shared Lane Markings may be used to: Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist's impacting the open door of a parked vehicle, Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane, Alert road users of the lateral location bicyclists are likely to occupy within the traveled way, Encourage safe passing of bicyclists by motorists, and Reduce the incidence of wrong-way bicycling. in addition to or instead of a Bicycles May Use Full Lane sign to inform road users that bicyclists might occupy the travel lane.



**Sidewalk Bikeway:** Sidewalk Bikeways are not officially designated as an approved bicycle facility in the HDM, and are instead classified under Class III bicycle facilities. In general, the designated use of sidewalks for bicycle travel is unsatisfactory because sidewalks are primarily intended to serve pedestrians, generally do not meet Caltrans' bikeway design standards, and do not minimize motor vehicle cross flows. In the past, the City designated some routes with signs and marking in an attempt to minimize these conflicts. Many of these designations have been fully or partially removed because they gave cyclist a false sense of use rights over pedestrians. When sidewalk bikeways are implemented, the bikeways should provide bikeway continuity along high speed or heavily traveled roadways having inadequate space for bicyclists, and be uninterrupted by driveways and intersections.



**Bicycle Boulevard:** Bicycle boulevards are not officially designated as a bicycle facility. Instead, they are an enhanced Class III bicycle route with lower traffic speed and volume. Bicycle boulevards typically feature traffic calming and road improvements that will provide improved bicycling conditions as compared to non-boulevard Class III facilities. Bicycle boulevards typically include design features that prohibit the continuous flow of vehicles along a particular corridor while permitting the continuous flow of bicycles along that corridor.



## 5.2 Existing Bicycle Facilities and Activity Areas

The existing Ventura bikeway system is shown on Figure 2, and consists of Class I Bike Paths, Class II Bike Lanes, Class III Bike Routes, Shared Lane Markings and Sidewalk Bikeways.



**Figure 2: Existing Bikeway Network**

The existing Class I bike path system consists of the following primary Class I Paths:

- Ventura River Trail
- Ventura Beach Trail
- State Route 126 Bike Path

The existing Class II bike lane system consists of the following primary Class II bike lane corridors:

- Main Street
- Telegraph Road
- Telephone Road

The existing Class III bike route system consists of the following primary bicycling corridors:

- Ventura River Trail
- Ventura Beach Trail
- State Route 126 Bike Path
- Main Street
- Telegraph Road
- Telephone Road
- Victoria Avenue
- An East-West Residential Streets Route

The existing Sidewalk bike lanes are at the following constrained locations:

- Main Street at US 101
- Telephone Road at US 101

The existing Shared Lane Markings are along the following primary corridors:

- Seaward Avenue
- Poli Street
- Olive Street

The Ventura River Trail is designated as a Class I bikeway. The approximately 6.2-mile trail links the State-owned Omer Rains Trail with Ventura County's Ojai Valley Trail. The trail serves as the keystone for a regional trail system connecting trails within a tri-county area. The Ventura River Trail serves pedestrian, bicyclist, and other trail user groups, and facilitates bicycle commuting in the Ojai and Ventura areas, as shown in Figure 1. Based on City employment information and mode split data, weekly commuter use on the trail is estimated at 550 employees and 600 students per day, or a total of 8,225 commuter uses per week.

Observations about the existing bicycling conditions in Ventura were gathered from public input at the workshops and from the Bicycle Focus Group during group meetings, and include the following:

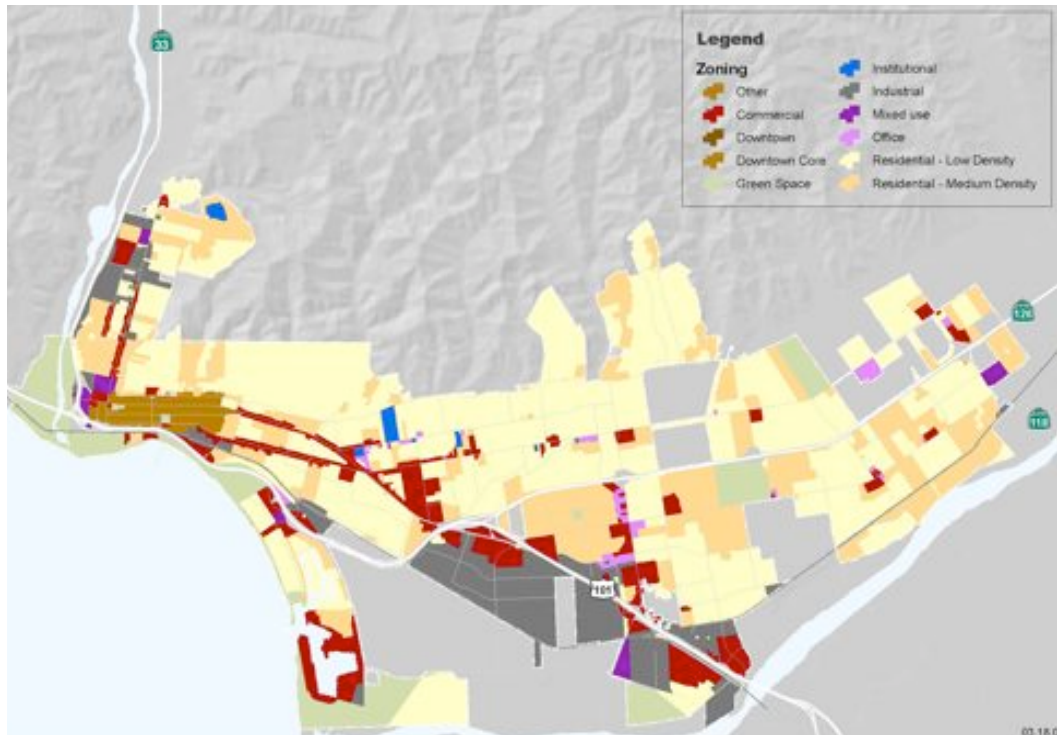
- Ventura has a favorable climate, relatively flat terrain, moderate to medium density residential neighborhoods near employment centers, high percentage of work trips that are less than 15 minutes, and a high number of potentially convenient bikeways.
- The city has a well-developed grid network of arterial and collector streets that provide opportunities for cross-town bike lanes or bike routes. The major east-west roadways include Thompson Boulevard, Main Street, Telephone Road, Telegraph Road, Poli Street, and Foothill Road. The major north-south roadways include Ventura Avenue, Seaward Avenue, Harbor Boulevard, Victoria Avenue, and Kimball Road.
- Most of the City's arterial and collector streets serve high volumes of vehicles with some streets having relatively high speed limits (40 mph or greater), a factor that may be intimidating to inexperienced cyclists. Many commuter and non-recreational cyclists currently prefer to ride on sidewalks along the arterial roadways, sometimes riding against the flow of traffic.
- The City's existing bicycle network is disconnected in many areas and does not serve well for cross-town bicycle travel. Many of these disconnected areas exist where there are higher traffic volumes and bike facility needs compete with vehicle capacity needs.
- Education programs need to be provided so that both bicyclists (child and adult) and motorists so that use of the limited roadway area can be used in a safer and more respectful manner.
- Bicycle parking facilities need to be expanded to cover more commercial areas to serve the needs of utilitarian bicyclists. Bicycle parking facilities at existing commercial, industrial, and higher density residential developed areas are not being adequately maintained or, in some cases, being removed by private property owners.
- The U.S. 101 Freeway and Union Pacific Railroad tracks present a barrier between the North and South portions of the city. Heavy volumes and high speeds at freeway interchanges create potential conflicts, even in the presence of striped bike lanes.

The map of the existing bikeway facilities includes select parking facilities, major transit centers, and commercial centers.

### 5.3 Existing and Proposed Land Use

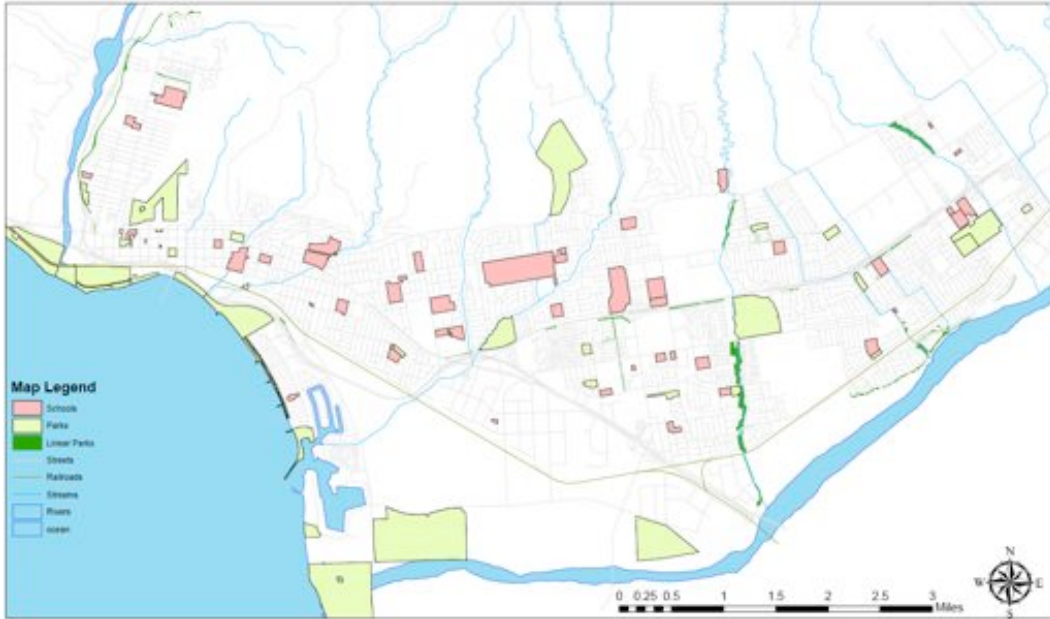
The City of Ventura's Bikeways Map delineates commercial, residential, industrial, agriculture, and park land uses within the City's planning area. Overall, Ventura has diverse development, consisting of moderate- to medium-density residential neighborhoods near employment centers, commercial and office space, and some industrial land uses. Future land uses include both commercial and residential developments.

The City's General Plan Diagram and Public Facilities figures, included in the General Plan, show Linear Park Network system, which includes both developed and natural areas designated within the City for potential multi-use trail and Class I bikeway uses.



**Land Use Plan Zoning**

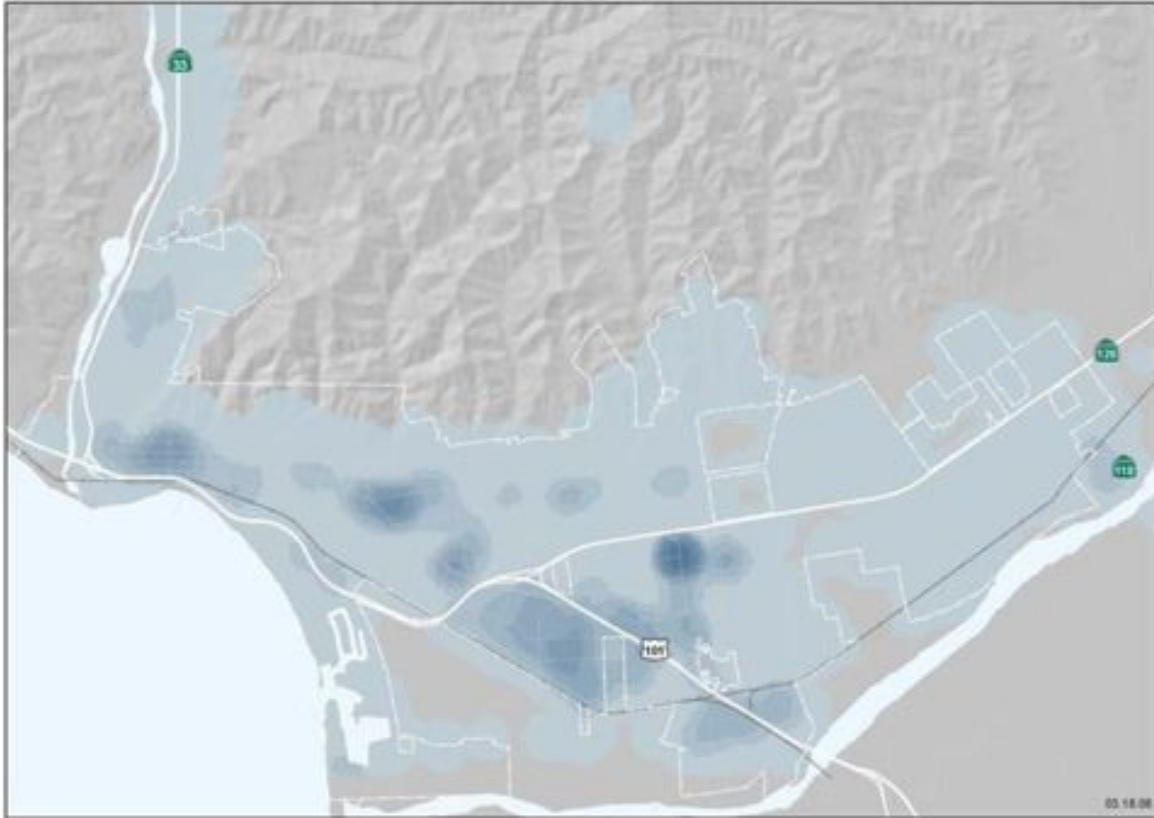




### **Parks, Linear Parks and Schools**

The City Bikeways Map was developed in concert with the Public Facilities (linear parks), General Plan Diagram (land use plan), and Roadway Classification Plan figures of the General Plan to integrate land use, circulation and recreational considerations. The City Bikeways Map includes an overlay of residential, commercial and industrial land use designations, as well as schools, hospitals, parks and other destinations. It also shows where City bikeways join those of adjacent cities, the County of Ventura, and the State of California.

It is important for the City Bikeway Network to provide access from the various residential neighborhoods within the City to the major employment centers within the City, depicted below via employment density.



**Employment Density**

#### **5.4 Bicycle Parking**

Bicycle parking includes bike racks, lockers, and corrals. Bicycle parking is available throughout Ventura, from commercial lots, into the downtown area, and at the major employment centers. A variety of bicycle parking is available throughout the City, ranging from Class I bike racks to Class III storage facilities, as well as including some older “wheel-bender” racks which are no longer suitable as standard bicycle parking facilities. The city currently has an existing program to install bicycle rack posts at requested locations, and has installed numerous bicycle rack posts throughout the City.



## 6.0 Bicyclists' Use of Facilities

The Bicycle Master Plan must have a structured methodology for selecting and prioritizing needed improvements to the bicycle system. In addition to bicycle facility cost, roadway segment grades, intersection crossing complexities, bike path connectivity, input gathered from the Bicycle Focus Group and other community input, this Bicycle Master Plan also considers Bicycle Compatibility Index factors and Bicycle Demand Index factors as part of its prioritization strategy.

The **Bicycle Compatibility Index** is a tool for bicycle coordinators, transportation planners, traffic engineers, and others to evaluate the capability of specific roadways to accommodate both motorists and bicyclists

The **Bicycle Demand Index** is a tool to assess potential bicycling demand on a roadway segment that is estimated by considering land use characteristics, proximities to key destinations for bicycling trips, socio-economic attributes, and the accessibility/permeability of streets within the City.

### 6.1 Bicycle Compatibility Index

To develop or improve roadways for shared use by bicycles and motor vehicles, existing roadways must be evaluated to determine which roadways are considered “user-friendly” from the perspective of the bicyclist. Currently, there is no methodology widely accepted by engineers, planners, or bicycle coordinators that will allow them to determine how compatible a roadway is for allowing efficient operation of both bicycles and motor vehicles. Determining how existing traffic operations and geometric conditions impact a bicyclist's decision to use or not use a specific roadway is the first step in determining the bicycle compatibility of the roadway.

The Bicycle Compatibility Index (BCI) methodology was developed for urban and suburban roadway segments ( i.e., midblock locations that are exclusive of intersections) and incorporated those variables that bicyclists typically use to assess the "bicycle friendliness" of a roadway (e.g., curb lane width, traffic volume, and vehicle speeds). The research effort for the BCI expanded upon the stress level work of Sorton and Walsh and the Geelong Bikeplan Team to produce a practical instrument that can be used by practitioners to predict bicyclists' perceptions of a specific roadway environment and ultimately determine the level of bicycle compatibility that exists on roadways within their jurisdictions.

The Bicycle Compatibility Index model factors, as considered in the prioritization strategy in this Bicycle Master Plan, include the following factors:

- Presence of a bicycle lane
- Bicycle lane width
- Curb lane width
- Curb lane volume
- Other lane(s) volume
- 85<sup>th</sup> percentile speed of traffic
- Presence of a parking lane with more than 30% capacity
- Type of roadside development
- Adjustment factors for:
  - Hourly curb lane large truck volume
  - Hourly right turn volume
  - Parking time limit

The *Highway Capacity Manual* defines levels of service (LOS) as "...qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists and passengers." Currently,

the *Highway Capacity Manual 2000* provides LOS criteria for bicycles at signalized intersections, but does not provide LOS criteria for bicycles along roadway segments. The BCI provides LOS assessments for bicycling on various roadway segments. The LOS designations are based on the perceived comfort level for a bicyclist on the roadway segment and are established for LOS A through LOS F. LOS A (represented by a BCI less than or equal to 1.50), indicates that a roadway is extremely compatible (or comfortable) for the average adult bicyclist. LOS F (represented by a BCI greater than 5.30) is an indicator that a roadway is extremely incompatible (or uncomfortable) for the average adult bicyclist. The BCI ranges and their associated LOS designations are shown in the table below:

**Table: Bicycle Compatibility Index (BCI) ranges associated with level of service (LOS) designations and compatibility level qualifiers**

LOS	BCI Range	Compatibility Level <sup>1</sup>
A	≤ 1.50	Extremely High
B	1.51 – 2.30	Very High
C	2.31 – 3.40	Moderately High
D	3.41 – 4.40	Moderately Low
E	4.41 – 5.30	Very Low
F	> 5.30	Extremely Low

<sup>1</sup>Qualifiers for compatibility level pertain to the average adult bicyclist.

Since the BCI is developed on a basis of perceived comfort levels, it is important to consider that bicyclists have differing levels of experience. The process for developing the BCI determined that there were three groups of bicyclists based on their riding habits, and that casual recreational bicyclists were generally less comfortable across all locations than experienced recreational or experienced commuter bicyclists. As a result of these differences, separate BCI models were produced for each of the three bicyclist groups in addition to the model for all bicyclists. Since it is likely that all types of bicyclists will have the opportunity to ride on any given roadway segment, the BCI model (and its associated LOS designations) corresponding to all bicyclists should be used for most applications.

Bicycle facilities should be designed at LOS C or better where casual bicyclists are expected.

The Bicycle Compatibility Index factors listed above have been considered in the the development of the recommended bikeway system for Ventura. Additional details regarding the Bicycle Compatibility Index (BCI) methodology are provided in the Appendix.

## 6.2 Bicycle Demand Index

The Bicycle Demand Index provides an assessment of the potential bicycling demand along a given roadway segment. The methodology is based on research conducted for the US Environmental Protection Agency on the relationship between built environment and travel patterns. The Bicycle Demand Index analysis uses a combination of existing GIS data and newly collected information to develop variables highly correlated with bicycling activity.

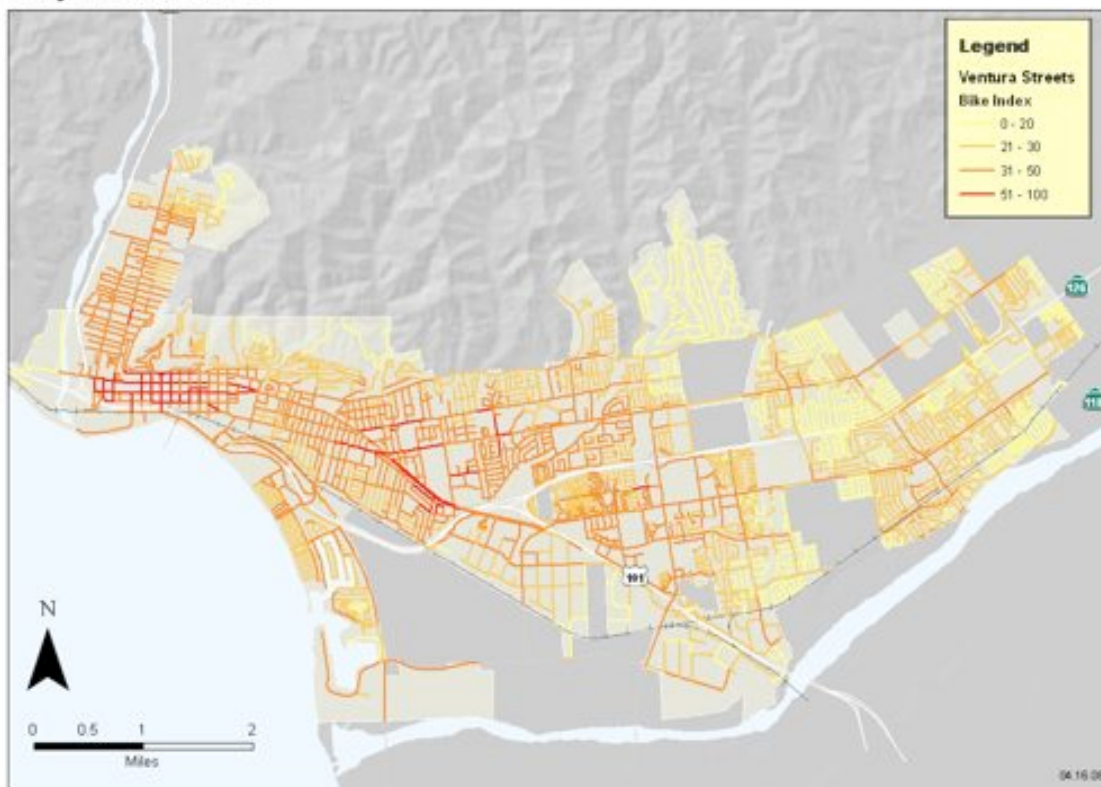
The Bicycle Demand Index for a given roadway segment is a number between 0 and 100, with 100 being the highest demand index possible. Because bicycle activity is highly dependent on many factors, a number of variables were compiled to forecast bicycle demand. The methodology for determining the Bicycle Demand Index assigns a weight and score to the following factors:

- Built Environment (Density and Diversity of land uses)
  - Population Density
  - Employment Density
  - Land Use Mix

- Proximity Factors (Destinations)
  - Schools
  - Parks
  - Transit Proximity – Bus Stops
  - Transit Proximity – Rail Stops
  - Commercial Districts
  - Other Activity Centers: Proximity to Beach
- Demographics
  - Age
  - Income
  - Vehicle Ownership
- Street Permeability / Accessibility (Design)
  - Street Segment Length
  - Interaction Density
  - Axial Map / Street Connectivity
  - Bike Network

The Bicycle Demand Index map for Ventura is presented in **Figure 3**. Complete details regarding the methodology for determining the Bicycle Demand Index are available in the Appendix.

### City of Ventura



**Figure 3:** Bicycle Demand Index Score

Vital streets that serve as a link to a variety of uses and destinations scored particularly high on the Bicycle Demand Index, including Ventura Avenue, Main Street, Thompson Boulevard, and the western part of Telegraph Road.



## 7.0 Recommended Bikeway Network

The recommendations made by this Bicycle Master Plan for the City of Ventura consist of a recommended bikeway network, bicycle support facilities, and programs including monitoring, maintenance, education, and encouragement. The recommended bikeway network includes Class I bike paths, Class II bike lanes, Class III bike routes, bicycle boulevards, and additional corresponding on-street facilities that include construction, striping, signing and/or signalization improvements at specific locations throughout the City.

### 7.1 Recommended Bikeway Network

The recommended bikeway network, as shown in **Figure 3**, contains Class I, II, III bikeways, and bicycle boulevards in addition to point improvement locations, to facilitate commuter, recreational, and utilitarian trips by bicycle throughout the City of Ventura with connections to adjacent jurisdictions.



**Figure 3: Recommended Bikeway Network**

The process for selecting the bikeway network for the City included receiving input from the local bicycling community, community council workshop meetings, riding all of the routes in the City, discussing conditions with local staff familiar with the best routes, and identifying constraints and opportunities. The City's street system and continuous property corridors such as utility right-of-ways, railroad right-of-ways, and watercourses were also reviewed via the use of maps, aerial photographs and field reconnaissance. Public workshops and surveys were also conducted, where residents were asked to identify unsafe bicycling conditions in the City along with their preferred cycling routes. Respondents were also asked for their desired improvements to the bikeway network.

The recommended bicycle routes within the City were based on improvements to the City's Bikeway System Map, as referenced in the General Plan (which includes Class I, II, and III bikeways to be established within the City's Planning Area). An important step in the development of the recommended bikeway network was the development of a dual-backbone citywide bicycle route system. As shown in



**Figure 4**, this dual-backbone bicycle route system provides one set of route options for the more experienced (less timid) bicyclists who are comfortable riding on roads with higher traffic volumes and higher vehicles speeds, and another set of route options for the less experienced (more timid) bicyclists who are more comfortable riding on roads with lower traffic volumes and lower vehicles speeds.



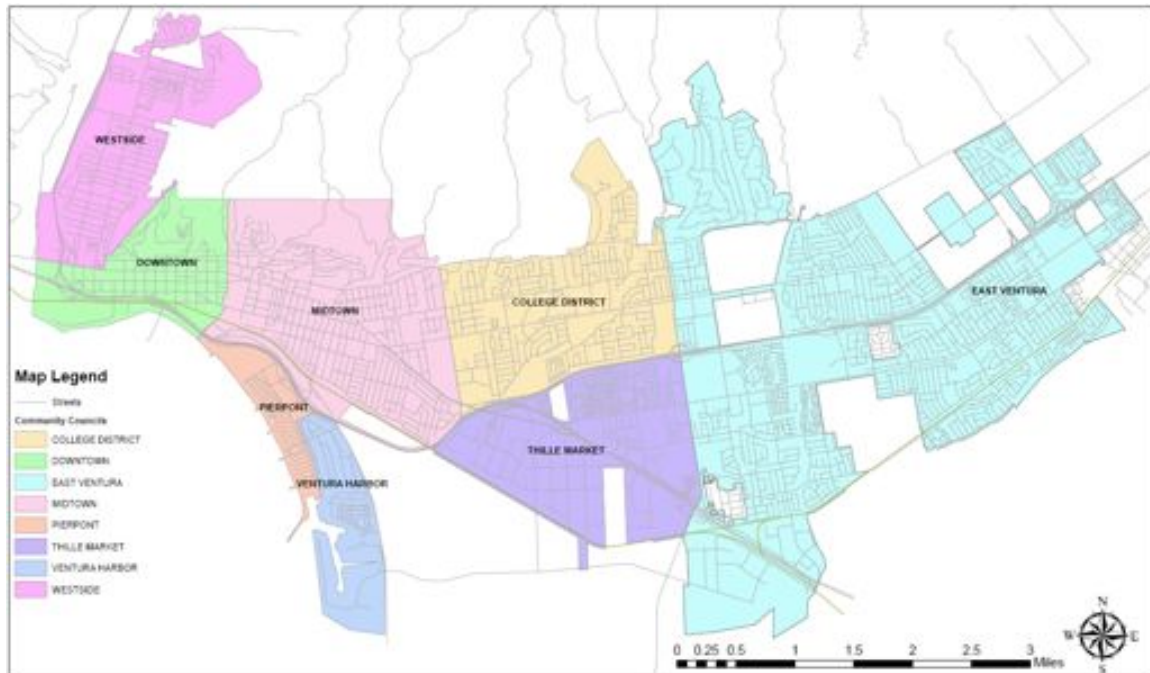
**Figure 4: Recommended Bikeway Routes**

The following criteria were considered in the development of the prioritized bikeway network:

- Existing bicycling patterns
- Connectivity
- Community input
- Traffic volumes and travel speeds
- Potential side-street conflicts
- Street width and travel lane widths
- Pavement condition
- Access from residential areas
- Number of destinations served
- Latent Bicycling Demand
- Topography
- Integration into the regional system
- Adjacent land use
- On-street parking
- Incident data and safety concerns
- Opportunities and constraints
- Planned roadway improvements
- Routes with intersection protection and minimal delay

The recommended Ventura bikeway network is characterized by Class I bike paths, Class II bike lanes, Class III bike routes, and bicycle boulevards, which serve recreational, commuter, and utilitarian destinations. The recommended bikeway network is meant to fill in gaps in existing routes as well as to expand the system into areas where it is under/undeveloped. Additionally, a small number of Class III routes are recommended where other bikeway facilities are not feasible at this time; and another select number of Class III routes are recommended to serve as primary east-west and north-south bicycling corridors through the City.

The proposed bikeway projects are prioritized into short term (1-5 years) and long term (6-20 years) for eight geographical areas of the City.



### Geographic/Community Council Areas

Each of the recommended priority projects for the next 20 years are identified in lists for each geographic area within the appendix at the back of this Plan. Near term higher priority projects that will be a focus within the first 5 years are identified within the lists provided in this chapter. The priority projects were selected by staff, community input, and consultants based on the City's Capital Improvement Plan, roadway segment grades, intersection crossing complexities, Bicycle Compatibility Index factors, Bicycle Demand Index factors, personal experience, available funding programs, the timing of scheduled roadway improvement projects in the city, coverage, connectivity, local input, and ease of implementation. The short term high priority projects were chosen to meet immediate needs, serve as many activity centers within the City as possible, provide improved public safety, and provide access to as much of the City as possible.

The high priority projects within the first 5 years include several of the bicycle boulevards and solid bike route lines as identified for the Recommended Bikeway Routes as shown in Figure 4. A few other projects have also been selected to complete high priority dashed bike route line segments within the first 5 years. Specific listings of the recommended high priority near term projects by type of facility for each of the City's geographic areas are provided as follows:

<b>Westside</b>					
<b>Class 1</b>					<i>Westside</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Cameron St Extension	Cameron St 150ft S of E Vince St	Cameron St 150ft N of E Warner St	City	401	\$1,732,000
Cameron St Extension	Cameron St 150ft N of Comstock Dr	De Anza Dr	City	1,104	\$4,768,000
Ventura River Bike Path Connector - Simpson St	Ventura River Bike Path	W Simpson St	City	206	\$250,000
Ventura River Bike Path Connector - Westpark Community Center	Westpark Community Center Parking Lot	W Prospect St	City	153	\$20,000
<b>Class 2</b>					<i>Westside</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
E Park Row Av	Ventura Av	Wall St	City	273	\$5,000
Wall St	E Park Row Av	Cedar St	City	807	\$14,000
Cedar St	Ferro Dr	Kellogg St	City	2,982	\$5,000
<b>Class 3</b>					<i>Westside</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Cameron St	Kellogg St	Cameron St 150ft N of E Warner St	City	822	\$1,400
Cameron St	Cameron St 150ft S of E Vince St	Cameron St 150ft N of Comstock Dr	City	1,644	\$2,700
Cameron St	De Anza Dr	City Limits 100ft N of Pomo St	City	2,376	\$4,000
Kellogg St Bike Boulevard Connector	Cameron St	Cedar St	City	461	\$800
N Olive St	Rex St	Center Av	City	1,905	\$3,200
W Park Row Av	Ventura River Bike Path	Ventura Av	City	1,653	\$2,800
W Simpson St	Riverside St	Cedar St	City	3,004	\$5,000
W Vince St	Riverside St	Ventura Av.	City	3,489	\$5,800
<b>Point Improvements</b>					<i>Westside</i>
<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>	<u>Cost (USD)</u>		
Ventura Av. / W & E Park Row Av	Improvements – Improved Crossing	Improvements may include a signal	\$175,000		
Ventura Av. / W & E Simpson St	Improvements - Improved Crossing	Improvements may include a signal	\$175,000		
Ventura Av. / W & E Vince St	Improvements - Improved Crossing	Improvements may include a signal	\$175,000		
Julian St / US 33 Offramp	Installation – Future bike path signal crossing on SR 33 ramp	Improved signalized crossing	\$175,000		

Downtown					
Class 1				Downtown	
Section Name	Start	End	Jurisdiction	Length (ft)	Cost (USD)
Omer Reins Trail - Shoreline Dr	Ventura River Bike Path	2000ft E of Ventura River Bike Path	City	1,958	\$4,000,000
Class 2				Downtown	
Section Name	Start	End	Jurisdiction	Length (ft)	Cost (USD)
Harbor Bl	Harbor Bl Extension	Figueroa St	City	875	\$15,000
Harbor Bl	Figueroa St	San Jon Rd	City	4,422	\$77,000
W Harbor Bl Extension	S Garden St	Harbor Bl	City	1,017	\$18,000
Poli St – Cedar St Corner	Ferro Dr	Palm Dr	City	1,045	\$18,000
Class 3				Downtown	
Section Name	Start	End	Jurisdiction	Length (ft)	Cost (USD)
Ash St	Front St	FWY 101 Bike Path Overpass	City	168	\$300
California St	Poli St	Harbor Bl	City	2,168	\$3,600
Emma Wood State Park Entrance	Main St	Emma Wood State Park	City	1,045	\$1,700
Front St	Ash St	Kalorama St	City	463	\$1,000
S Garden St	S Olive St	W Front St	City	133	\$1,000
S Olive St	S Garden St	Brooks Av	City	100	\$1,000
S Olive St	Brooks Av	W Santa Clara St	City	719	\$1,200
Thompson Bl	Ventura Av	150ft E of S Chestnut St	City	2,927	\$4,900
Point Improvements				Downtown	
Location	Improvement Description	Comments	Cost (USD)		
Cedar St / Wall St	Improvements - Median Break	Provide Median Break for Bicycles	\$30,000		
US101 Overpass at Ventura Pier	Improvements - Consider improving access for bicyclist by removing Metal Railings at end of Bike Path	Improvements - Consider improving access for bicyclist by removing Metal Railings at end of Bike Path	\$500		
US101 Overpass at Ventura Pier	Improvements - Consider improving access for bicyclist by removing Metal Railings at end of Bike Path	Improvements - Consider improving access for bicyclist by removing Metal Railings at end of Bike Path	\$500		
Ventura Pier / Harbor Bl	Improvements – Improved Crossing	Improvements may include traffic signal	\$75,000		

<b>Pierpont</b>					
<b>Class 1</b>					<i>Pierpont</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
<b>Class 2</b>					<i>Pierpont</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Harbor Bl - WB	San Jon Rd	Allesandro Dr	City	498	\$9,000
Harbor Bl - WB	Seaward Av	Peninsula St	City	2078	\$36,000
Monmouth Wy	Pierpont Bl	Harbor Bl	City	486	\$8,000
<b>Class 3</b>					<i>Pierpont</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
<b>Point Improvements</b>					<i>Pierpont</i>
<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>			<u>Cost (USD)</u>
Seaward Av at Harbor Bl	Improve bike access through intersection	Bike lane realignment with signal detection and colored bike lanes across weaving/merging areas.			\$20,000
Vista Del Mar / Harbor Bl	Install signal crossing				\$175,000

<b>Harbor</b>					
<b>Class 1</b>					<i>Harbor</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Beachmont St Extension	Harbor Bl	Arundell Bike Path	City	539	\$160,000
<b>Class 2</b>					<i>Harbor</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Anchors Wy	75ft N of Beachmont St	75ft S of Beachmont St	City	157	\$3,000
Schooner Dr	Anchors Wy	Harbor Bl	City	770	\$12,500
<b>Class 3</b>					<i>Harbor</i>
<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Beachmont St	Seaview Av	Harbor Bl	City	574	\$1,000
<b>Point Improvements</b>					<i>Harbor</i>
<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>	<u>Cost (USD)</u>		
Harbor Bl / Beachmont St	Install - Signal Crossing	Install Signal Crossing	\$175,000		



Midtown					
Class 1					Midtown

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Cabrillo Middle School Shortcut Bike Path	S Crimea St	Chrisman Av	City	1,080	\$300,000
Pacific Mall NW Bike Entrance	East End of Central Av	Pacific Mall Parking Lot	City	19	\$5,000
UPRR Crossing – Seaward Ave	Vista Del Mar Dr	Channel Dr	City	127	\$150,000

Class 2					Midtown
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<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Alessandro Dr	Seaward Ave	Vista Del Mar Dr	City	644	\$11,000
Main St	Santa Cruz St	Telegraph Rd	City	4,928	\$86,000
Pacific View Mall East Bike Lane	Pacific View Mall Near Maple St	Telegraph Rd	City	2,739	\$48,000
Pacific View Mall West Bike Lane	Pacific View Mall Near Sears	Pacific View Mall Near Main St	City	2,182	\$38,000
Thompson Bl	150ft E of Chestnut Av	Seaward Av	City	7,728	\$250,000
Vista Del Mar Dr	Seaward Ave East RR Crossing	Vista Del Mar Ext Bike Path	City	1,872	\$33,000
Main St (NB only)	Telegraph Rd	Mills Rd	City	4,000	\$34,500
Main St	Mills Rd	Arundell Av	City	1,040	\$127,000

Class 3					Midtown
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<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Catalina St	San Nicholas	Poli St	City	1,296	\$2,200
Channel Dr	Seaward Ave	Preble Av	City	1,824	\$3,000
Evergreen Dr	Ocean Av	Preble Av	City	800	\$1,300
Frances St	Preble Av	Thompson Bl	City	1,592	\$2,700
Howard St	Preble Av	San Nicholas St	City	2,236	\$3,700
Lemon Grove	Preble Av	Main St	City	754	\$1,300
Ocean Av	Evergreen Dr	Frances St	City	1,797	\$3,000
San Nicholas St Extension	Katherine Dr	Thompson Bl	City	1,328	\$2,200

Point Improvements				Midtown
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<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>	<u>Cost (USD)</u>
Seaward Av / San Nicholas St	Install - Signal Crossing	Install Signal Crossing	\$175,000
Telegraph Road / Main St / Thompson Blvd	Improvements – Intersection	Redesign Intersection for Ped/Bike Access through intersection; consider removing EB Thompson Blvd free right lanes	\$475,000
UPRR railroad crossing at Seaward Ave.	Installation - Railroad crossing	Install Railroad grade crossing	\$140,000

## Thille Market

### **Class 1**

*Thille Market*

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Cypress Point Bike Path - Telephone Rd Crossing	S Cypress Point Bike Path	N Cypress Point Bike Path	City	101	\$7,000
FWY 126 Bike Path - Imperial Mobile Home Park	Chadwick Pl	Bennett Av	City	1,295	\$1,000,000
FWY 126 Bike Path Overpass - El Camino Real Park	FWY 126 Bike Path	Camino Real Park	City	1,342	\$2,000,000

### **Class 2**

*Thille Market*

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Portola Rd	Telephone Rd	Thille St	City	1,072	\$19,000
Thille St	County Square Dr	Victoria Av	City	597	\$10,000

### **Class 3**

*Thille Market*

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Arundell Av	Arundell Ct	Market St	City	802	\$1,300
Donlon St	Market St	Shopping Center Entrance	City	1,549	\$2,600
Dowell Dr	Walker St	Ralston St	City	545	\$900
Poinsettia Plaza Bike Route	Donlon St	Telephone Rd	City	692	\$1,200
Walker St Ventura Blvd Connector	Walker St	Victoria Av	City	468	\$800

### **Point Improvements**

*Thille Market*

<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>	<u>Cost (USD)</u>
Cypress Pt Bike Path / Telephone Rd	Install - Signal Crossing and Ramps	Install Signal Crossing and Ramps	\$175,000
Telephone Rd / EB Main St	Improvements – Intersection	Redesign for Ped/Bike Access; Consider Bicycle Box for NB Telephone; Improve signalization/signage/visibility SB Telephone right turn crosswalk; reduce conflicts NB Left bicyclist with SB right turn vehicles by installing crosswalk on N leg of Telephone	\$475,000

## College District

### Class 1 College District

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Buena High School Extension	Wake Forest Av	Victoria Av	City	990	\$300,000
Hwy 126 Overpass @ Camino Real Park	Camino Real Park	Hwy 126 Bike Path	City	1,342	\$22,000,000

### Class 2 College District

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Telegraph Rd	Mills Rd	Ashwood Rd	City	2,639	\$323,000
Victoria Av	Hunter Av	Walker St	City	9,027	\$157,000

### Class 3 College District

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Ashwood Av	Telegraph Rd	Dean Dr	City	2,193	\$3,700
Dean Dr	Mills Rd	Redwood Av	City	2,313	\$3,900
Dean Dr	Redwood Av	Estates Av	City	4,116	\$6,900
Loma Vista Bike Route	Victoria Av	City Limits at Hill Rd	City	1,734	\$2,900
Wake Forest Av	Aurora Dr	Buena High School Bike Path	City	632	\$1,100

### Point Improvements College District

<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>	<u>Cost (USD)</u>
Bryn Mawr St / Aurora Dr	Install - Signal Crossing	Install Multi-Way Stop or Signal	\$5,000
El Camino Real Park / Aurora Dr	Install - Curb Ramp	Install Curb Access Ramp	\$3,000
Mills Rd / Main St Intersection NE Corner	Improvement - Modify Signage to prevent right turns	Install signage to prohibit double right turns during bicycle and pedestrian crossings.	\$10,000
Telegraph Rd at Barber Shop	Improvement - Roadway widening for Bike Lanes	Widen North side of Telegraph (WB)	\$80,000
Telegraph Rd at Buena Trailer Villa	Improvement - Roadway widening for Bike Lanes	Widen North side of Telegraph (WB)	\$80,000
Telegraph Rd at Old Vienna Restaurant	Improvement - Roadway widening for Bike Lanes	Widen North side of Telegraph (WB)	\$80,000
US 101 NB Offramp / WB Main St	Improvements - Upgrade to Bike Path	Improve WB Bike Lane transition to Bike Path	\$20,000

East Ventura					
Class 1					East Ventura

<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Brown Barranca East Bike Path Connector	Loma Vista Rd	400ft SE of Loma Vista Rd	City	418	\$300,000
HWY 126 Bike Path - Harmon Barranca Xing	Holmes Av	Kimball Bike Path	City	1,130	\$2,000,000
HWY 126 Bike Path - Hill St	HWY 126 Bike Path Shortcut Path	HWY 126 Bike Path Shortcut Path	City	142	\$10,000
Thille St - Government Center Shortcut	County Square Dr 600ft W of Victoria Av	Hill Rd	City	2,225	\$153,000

Class 2					East Ventura
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<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Thille St	County Square Dr	Victoria Av	City	597	\$10,000
Thille St	Johnson Dr	Holmes Av	City	1,123	\$20,000

Class 3					East Ventura
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<u>Section Name</u>	<u>Start</u>	<u>End</u>	<u>Jurisdiction</u>	<u>Length (ft)</u>	<u>Cost (USD)</u>
Balboa St	Cambria Av	City Limits 450ft E of Cambria Av	City	466	\$800
Bristol Rd	Grand Av	City Limits 125ft E of Katherine Av	County	1,007	\$1,700
Bristol Rd	City Limits 125ft E of Katherine Av	Johnson Dr	City	1,935	\$3,200
Cambria Av	Telegraph Rd	Balboa St	City	1,096	\$1,800
Coolidge St	Hoover Av	Harding Av	City	733	\$1,200
Holmes	Thille St	FWY 126 Bike Path	City	339	\$600
Hoover Av	Coolidge St	Telegraph Rd	City	181	\$500
Thille East Bike Route	Kimball Rd	Wells Rd	City	12,606	\$21,000
Wilson St	Ford St	Colton St	City	1,189	\$2,000
Woodland St	Victoria Av	City Limits at Hill Rd	City	1,818	\$3,000

Point Improvements				East Ventura
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<u>Location</u>	<u>Improvement Description</u>	<u>Comments</u>	<u>Cost (USD)</u>
Chumash Bike Path Telephone Rd Curb Ramp	Install - Curb Ramp	Install Curb Access Ramp	\$3,000
Chumash Bike Path Telephone Rd Curb Ramp	Install - Curb Ramp	Install Curb Access Ramp	\$3,000
Chumash Park at Petit av	Modify - Access Ramp - Relocate "Park Closes at dusk" sign to side of path. Signage on bike paths through parks should allow bicyclists to travel on bike paths after dusk.	Modify - Access Ramp - Relocate "Park Closes at dusk" sign to side of path. Signage on bike paths through parks should allow bicyclists to travel on bike paths after dusk.	\$3,000

Chumash Park Bike Path at Waco St	Modify - Move Bollard and sign to side of Bike Path	Relocate bollard / sign to Provide 5ft of access width. Modify - Access Ramp - Relocate "Park Closes at dusk" sign to side of path. Signage on bike paths through parks should allow bicyclists to travel on bike paths after dusk.	\$3,000
Chumash Park Bike Path at Waco St	Modify - Curb Access ramp width	Increase Curb Access ramp width to width of bike path.	\$3,000
Harmon Barranca Bike Path / Johnson Dr	Improvements - Intersection	Improve Path Connection Alignment and Install Signal Crossing. Include improvements at US 101 Bridge Bike Path access	\$175,000
Harmon Barranca Bike Path East / Ralston St	Improvement Gate Access	Improve bicycle access through gate. Currently too narrow.	\$6,000
Harmon Barranca Bike Path East / Telephone Rd - Center island crossing	Install - Curb Ramps - Signal Crossing	Modify Median, Install Curb Access Ramps and Install signal	\$175,000
Harmon Barranca Bike Path West / Bristol Rd	Install - Curb Ramps - Signal Crossing	Install Curb Access Ramp and improve crossing (future signal?)	\$70,000
Hoover Av at Telegraph Rd	Modify - Median Break	Provide Median Break on Pork Chop Island for Bicycle and Pedestrian Access	\$6,000

### 7.1.1 Recommended Route Treatments

The City should adopt Caltrans recommendations for a numbered bicycle route system. Numbered routes improve wayfinding along City streets and paths, provide bicyclists a more efficient way of sharing directions, and establish a direct link between information provided on the City bikeway maps (whether paper maps or online digital maps) and what bicyclists see on the streets as they ride. And in addition to a numbered route designation, it would also be suggested that each bike route include a name designation.



Action: Implement bike route signage to complete the bicycle boulevards and solid bike route lines as identified for the Recommended Bikeway Routes as shown in Figure 4.

Action: Adopt a numbered bicycle route system to be signed according to Caltrans standards.

Action: Adopt route name designations in addition to the numbered route system.

Action: Improve signage for the existing Pacific Coast bike route

### 7.1.2 Class I Bike Path Considerations

Class I Bike Paths in Ventura are often shared-use trails, which provide bicycle, pedestrian, skater, and even equestrian users a lengthy trail for utilitarian and recreational purposes, and prohibit motor vehicles. The ideal path should have frequent access to adjacent land use, entrances which attract bicyclists but discourage motor vehicles, appropriate signing to inform users of adjoining access connections, adequate sight-distance, and support facilities which encourage use, and should be relatively straight so that it can be safely navigated at higher speeds typically achieved by commuter bicyclists.



Action: Improve access to bicycle paths by providing frequent access to adjacent land uses. New bike path facilities should be designed with frequent access to and from the facility and additional access points should be created along the existing bike path facilities.

Action: Path entrances should be easily identifiable, convenient for bicycles to use, and prohibit motor vehicle traffic from entering the path.



- Action: Place appropriate signing to enhance the usability of the path. This should include signs designating the street names of access connections along the path.
- Action: Multi-use paths should be signed with “Share the Path” signs and signs which designate right-of-way.
- Action: Straighten paths to allow higher speeds typically achieved by commuter bicyclists. For existing paths, consider straightening sections with numerous and/or sharp curves wherever feasible. Newly constructed paths should be designed to be as straight as possible. Reducing the number of curves in the path will allow for more adequate sight-distance to identify other users and hazards along the facility.
- Action: Sharp back-to-back curves should not be used in an attempt to slow bicyclists where a path approaches a roadway intersection. Unnecessary curvature of a path can entice bicyclists to cut corners to straighten out the curves, and could lead to head on collisions.
- Action: Consider the addition of support facilities such as water fountains, rest areas, maps, and bicycle parking along the path to encourage bicycle use.



### 7.1.3 Recommended Signing and Striping Policies

All bikeway signing on public roadways in Ventura should conform to the signing identified in the Caltrans Manual on Uniform Traffic Control Devices (CA MUTCD) and/or the Manual on Uniform Traffic Control Devices (MUTCD). These documents give specific information on the type and location of signing for the primary bike system. A list of bikeway signs that are recommended for Class I, II, and III facilities, including some of those specified in Caltrans and the MUTCD, are shown in the Appendix.

- Action: Adopt Caltrans recommendations for bikeway signing and striping. These are shown in the Appendix.
- Action: Installing signs along the bikeway can be implemented much more easily than major striping or path construction projects. For example, placing signs to designate Class III bike routes can connect gaps in existing routes. Since signing is relatively easy to implement, it should receive priority consideration during the implementation of the Bicycle Master Plan.
- Action: Create a City Ordinance or internal policy document requiring all roadway striping projects to be examined by the City’s Traffic Engineer for the possibilities of improving existing bike lanes, adding new bike lanes, and/or simply providing additional width for bicyclists.
- Action: Create a policy that existing and/or proposed Class II bike lane facilities not be removed from the City’s bikeway system to improve motor vehicle level of service without conducting a study to provide recommendations to maintain bikeway system continuity thorough analyzing non-removal alternatives and/or replacement facilities.

Action: Develop an official Ventura bikeway system logo for use on signs throughout the City bikeway system.

Action: Include shared lane markings on Class III bicycle facilities where appropriate.



## 7.2 Other On-Street Recommendations

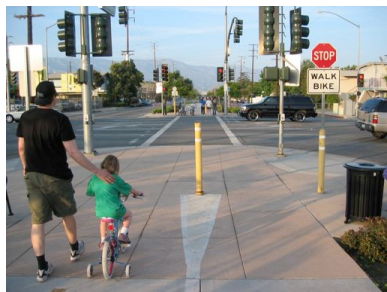
Other on-street recommendations include signalized intersections, innovative design treatments, and recommendations for handling constraint points.

### 7.2.1 Signalized/Roundabout Intersections

At traffic signal demand-actuated intersections, many bicycles do not have enough metal to be detected when loop detectors are used for signal actuation. This can cause bicyclists to wait a considerable amount of time for a motor vehicle to eventually actuate the signal, and bicyclists may be required to choose between proceeding to an alternative crossing location and crossing the street illegally. Studies should be conducted at demand-actuated intersections along popular bicycle routes to determine where bicycle-sensitive loop detectors, video detection methods, bicyclist positioning designations and/or easily accessible signal push buttons would be beneficial to cyclists. An appropriate detection method should be provided for each traffic lane or bike lane used by bicyclists at each demand-actuated approach to a signalized intersection.



Adjusted signal timing should be taken into consideration for intersections that are heavily used by cyclists. Studies at these intersections should analyze whether the existing signal timing provides adequate time for bicyclists to make their movements through the intersections, as well as to clear the intersection during the yellow and all-red phases.



If it is determined in the future that a signalized intersection in its present state is too dangerous for regular bicycle travel, there are several measures that can be implemented to mitigate this problem. Bicycle-only left turn lanes could be considered in areas where it is especially difficult or dangerous for bicyclists to make a left turn. The City of Davis, California, also uses “bicycle signal heads” at select intersections with a high volume of bicycles (one has over 1,000 bicycles an hour). As bicycling increases in Ventura, bicycle signal heads should be taken into consideration as a method of keeping traffic moving smoothly along heavily used bicycle routes.

Action: Improve or add traffic signal bicycle detection at all traffic signals as required by State Law in the following manner:

1. Add bicycle detection when installing a new traffic signal or when replacing existing

traffic signal detection systems.

2. Consider the addition of bicycle detection at signalized intersections along designated bikeways or at specific locations requested by the bicycling community as funding allows. During the preparation of this Plan, the following locations were identified for improved or added bicycle detection:
  - a. Chrisman Av/Main St
  - b. Seaward Av/Harbor Bl
  - c. Main St/Olive St
  - d. Ventura Av/Santa Clara St
  - e. Telephone Rd/Market St

Roundabouts are becoming more popular for consideration at locations that either have a need to carry a high number of vehicles to reduce congestion or for use on local streets where there is a desire to reduce traffic speeds. The high volume locations are typically large modern style roundabouts with multiple lane entries and exits as well as flared entries. These larger roundabouts can carry a high volume of traffic though an intersection at a much better level of service than a traditional traffic signal, however they can also be a barrier to safe and easy bicycle travel if the needs of bicyclists are not taken into consideration. Smaller neighborhood roundabouts or traffic circles are used as a way to create a slow down of traffic at local intersections and are sometimes used along bicycle boulevards and as neighborhood traffic calming devices.

**Action:** The City shall conduct an evaluation of roundabouts specifically as they relate to bicycle safety and ease of access. The evaluation shall include both high volume and low volume designs and provide examples of where each type has been implemented in other agencies. The evaluation shall make recommendations for design standards and details.

### 7.2.2 Innovative Design Treatments

The City should consider innovative design treatments where appropriate. This can include differently colored or differently textured bike lanes, advance bicycle stop lines at intersections, the use of shared lane markings, bicycle wrong way signage and the installation of bicycle boulevards. Virtually all signing modifications can be implemented at a relatively low cost, and many striping modifications can be implemented very cost effectively in conjunction with routine pavement rehabilitation projects.

**Action:** Differently colored or differently textured bike lanes should be considered at high vehicle volume conflict locations such as interchange intersections. For instance, at Victoria Avenue at Valentine Road, Seaward Avenue at US 101 northbound ramps, and Harbor Boulevard at Seaward Avenue



**Action:** Advance bicycle stop lines should be considered at higher volume bicycle left-turn locations to improve the visibility and awareness of bicyclists.

**Action:** The use of shared lane markings should be considered along all bicycle routes during the implementation of the Bicycle Master Plan.

- Action: The use of bicycle wrong way signage should be considered at locations where there is an observed high rate of bicycle wrong-way accidents. Example locations would include Main Street to the east of US 101 and Telephone Road south of Main Street.
- Action: Bicycle Boulevards are recommended as priority projects for the Cameron Street corridor and the San Nicolas Street corridor.

### **7.2.3 Constrained Areas**

Ventura has many constrained areas, which present challenges to the implementation of a complete bikeway network. These include several locations where the roadway becomes narrow, and widening would be required to install bike lanes. These segments include Main Street near Ventura High School, Main Street at the freeway overcrossing, Thompson Boulevard west of Telegraph Road, Telegraph Road west of Mills Road, Telephone Road east of Victoria Avenue, Seaward Avenue south of Thompson Boulevard, and Victoria Avenue south of Telegraph Road. Other constrained areas primarily occur at intersections with high traffic volumes. Many of the City's arterial intersections, especially in the commercial areas of the City, have dual left turn lanes and many also have dual right turn lanes, primarily near freeway entrance ramps.

#### *7.2.3.1 Left Turn Lanes on relatively Narrow City Streets*

Added left turn lanes on relatively narrow City street cross sections that were not designed with left-turn lanes in mind serve to eliminate the possibility of providing a bike lane along the outer portion of the roadway. In some cases, the intersection lane capacity has already been compromised to accommodate an added left turn lane pocket. This is the case along northbound Seaward Avenue at Main Street where a second through lane was eliminated in order to provide an added left turn lane.

Constrained areas with added left turn lanes can be handled by either widening the curb lane to provide space for a bike lane/wide curb lane or by dropping the bike lane on the approach to an intersection. Caltrans standards permit a bike lane to be dropped up to 30m in advance of a freeway interchange ramp entrance. However, this bike lane drop is not recommended when a through vehicular travel lane is adjacent to the curb. If the bike lane is dropped, the intersection approach should be widened in order to accommodate the bike lane leading up to the intersection.

#### *7.2.3.2 Dual Right Turn Lanes*

The Victoria Avenue/US 101 freeway interchange and the Telegraph Road/Victoria Avenue intersection have dual right turn lane configurations, which present a challenge to bicyclists trying to make through movements at these intersections. Several options are available to accommodate bicyclists making through movements at dual right turn lane intersections. Caltrans standards allow the bike lane to be dropped up to 30m in advance of an interchange ramp entrance, or bicyclists can be directed to the inside right turn lane to make their through movement. Chapter 1000 of the Caltrans Design Manual, Figure A6, item D shows a dual right turn lane configuration. Bicyclists may also be directed to the right and provided a signalized pedestrian-like crossing across a ramp entrance. This may impact the level of service for the intersection, especially during peak periods. This configuration may also be used at intersections where there is no freeway entrance ramp, such as Main Street at Mills road, in order to accommodate bicyclists proceeding straight through the intersection. While this option is well suited for less experienced riders, more experienced bicyclists would probably instead move over to the inside right turn lane to make the through movement. In order to accommodate bicycle turning movements more easily at intersections, the use of dual right-turn lanes should be avoided when considering level of service and/or capacity improvements at intersections. Prohibiting right turns on red should also be considered at vehicle dual right turn movement locations where motorists' right turns could conflict with bicycle through movements.

#### 7.2.3.3 *Single Right Turn Lanes*

At locations where there is a single right turn lane at an intersection, three options are available to accommodate bicyclists. If there is sufficient space in the travel way, Caltrans standards allow travel lanes to be narrowed to 11 feet, allowing a 4-foot bike lane to be inserted between the right turn lane and the adjacent through lane. If sufficient space is not available to provide a bike lane on the approach to the intersection, the bike lane may be dropped up to 30m before the intersection. Bicyclists would typically share the right turn with motor vehicles and continue through the intersection. At intersections with a higher volume of right turns, it may be appropriate to widen the roadway in order to accommodate a 4- or 5-foot bike lane between the turn lane and through lane.

#### 7.2.3.4 *Three-Lane and Four-Lane Directional Roadway Segments*

There are existing and proposed roadways where it may be feasible to reduce the number of travel lanes in order to provide space for a bike lane facility. These existing roadways include Victoria Avenue, Mills Road, and Telephone Road. After observing these roadways, it appeared that a substantial portion of the traffic using the curb lane consisted of right turning vehicles accessing the many commercial driveways along the roadways. It also appears that the volume in the curb lane was significantly less than that of the remaining lanes. The City should consider conducting traffic studies for these roadways to determine if an acceptable level of service can be achieved with a reduced number of through travel lanes. Under California law, right turn traffic is permitted to use a bike lane to make right turns into driveways and intersecting streets. If most curb lane traffic on a particular street is for right turns, then it is reasonable to assume that a minimal impact will be realized if the outside through lane is converted into a bike lane and right turns are accommodated in this way. The removal of the outside through lane on any street should be considered only if the City's established General Plan traffic level of service can be maintained with the reduced number of vehicular travel lanes.

Action: Work with Caltrans, Ventura County and the City of Oxnard to designate Hwy 126 preferred truck route and vehicular access to US 101 along Hwy 118 (Wells Road) to Santa Clara Avenue/Rice Road rather than Victoria Avenue. This re-designation could reduce through truck and vehicular traffic on Victoria Avenue and provide viable options to improve conditions for bicycling.

#### 7.2.3.5 *Diagonal Parking*

Diagonal parking along city streets (Main Street, for example), is a growing concern for many cyclists. Cars backing out may not see bicyclists coming (and vice-versa), creating a greater potential for collisions. A potential solution is the creation of "reverse diagonal" parking spaces that require motor vehicles to back into parking stalls, and exit forward in the same direction that traffic is flowing. These "reverse diagonal" stalls would put drivers in a more direct line of sight with bicyclists as they are exiting the space and makes the vehicle easily visible as it backs into the space. This solution should be researched in areas where current diagonal parking is determined to be especially hazardous, either by complaints from the public or the City Traffic Engineer's professional opinion.

#### 7.2.3.6 *Recommended Interchange Treatments*

It is recommended that bikeway access across the US 101 and SR 126 Freeways be improved by evaluating and treating each freeway interchange on an individual basis. Improved channelization techniques should be considered at right turn movements, with particular emphasis given toward improving dual right turn lane treatments where appropriate.



#### 7.2.4 General Roadway Condition Considerations

It is recommended that every roadway in the City be periodically evaluated for potential bikeability improvements (whether a roadway is a designated bicycle facility or not). Bicyclists have the same desired destinations as motorists, and small bikeability improvements can typically be implemented on even the most constrained roadway segments competing for the needs of many roadway users. Adjustments as simple as narrowing the inside travel lanes on a roadway to provide larger outside travel lanes for bicyclists can make a big difference, and many of these types of improvements can be made as part of regularly scheduled roadway maintenance activities at little to no cost.

### 7.3 Sidewalk Management

The use of sidewalks as bicycle facilities should be avoided wherever possible. Currently the City allows bicycles on sidewalks except where signs or pavement markings explicitly prohibit bicycles. The City should consider the use of stencils and signs to prohibit bicycle riding on sidewalks in areas where the City has received complaints about bicycles on sidewalks. The City should also consider prohibiting bicycles on sidewalks along streets with a large number of high-volume driveways.

Action: Adopt Caltrans recommendations for sidewalk management as provided in Chapter 1000 of the *Highway Design Manual* and specifically allow school children and adults accompanying them to use sidewalks. Consider the use of stencils and signs (supported by a City-adopted resolution) to prohibit bicycle riding on sidewalks in areas where shop or car doors open directly onto sidewalks (sidewalks located within shopping centers, the downtown district, etc.). Also, consider the use of stencils and signs to warn bicyclists of hazardous conditions or prohibit bicyclists from riding on sidewalks (as appropriate) in areas where there are numerous and/or high-volume driveways.



Action: Existing sidewalk-like paths in the City (particularly those within long continuous linear parks) should be upgraded to meet Caltrans standards, and all future bike paths planned in the City should be designed to meet Caltrans standard design guidelines for Class I bike path facilities. Caltrans guidelines recommend that the path be 12 feet wide inclusive of shoulders, with no obstructions present on the path. A minimum setback of 5 feet from the street is also recommended. It is possible that segments of existing sidewalk-like pathways within the City may need to be modified in order to achieve compliance with Caltrans recommendations.

Action: In the downtown core where bicycles are prohibited from riding on the sidewalk, place bicycle parking facilities in high-visibility, on-street areas where it does not interfere with existing vehicle parking or pedestrian crossing locations.



## 8.0 Support Facilities

Support facilities are facilities which complement the bicycle facility network. This includes integrated bicycle-transit services, bicycle parking, and shower and changing facilities. Together with the bicycle facility network, these facilities make bicycling a viable option in the City of Ventura.

### 8.1 Integration with Public Transit

Integrating bicycle accommodations with public transit allows for longer, more efficient commutes through intermodal transit. The Montvalo Metrolink Station has bicycle parking facilities available. While both Gold Coast Transit and VISTA busses are currently equipped to transport bicycles, improvements can still be made to the public transit system to encourage more bicycling.

#### Recommendations for Integration with Public Transit

**Action:** Improve bicycle storage facilities at train stations. This includes providing bicycle racks and lockers at existing transit stations and reserving adequate space for future bicycle racks and lockers during construction of new transit stations. Additionally, bicycle parking needs should be considered at heavily-used bus stops. This will require a separate study to determine if bicycle parking is needed at certain bus stops.



**Action:** Design roadways so that bicycles and bus transit co-exist safely. Bicycle and bus transit must be seen as compatible forms of transportation and should not be subject to trade-offs. Bicycle lanes should not be removed with the idea that this will improve bus service.

**Action:** Accommodate more bicycles on transit vehicles and on trains. Gold Coast Transit (GCT) busses are currently equipped with 2-bicycle and VISTA busses with 3-bicycle racks, but input from the community suggests that this does not always meet the needs of cyclists. The installation of 3-bicycle racks on GCT busses is currently not allowed by State Law due to overhang distance. Staff needs to continue to work with GCT to address this limitation. Bicycles should also be accommodated on trains to the greatest extent feasible.



**Action:** Count and report bicycle-on-transit trips. Intermodal use involving bicycle use on busses should be counted and recorded by local transit authorities to track growth and usage of bicycle-on-bus facilities. This information will be useful in assessing conditions and needs of public transit integration in the future.

## 8.2 Bicycle Parking

Bicycle parking is critical to making bicycling effective as a means of transportation. Many people with bicycles would use them more if additional secure bicycle parking were available. Bicycles left unattended are prone to vandalism and theft. Bicycle components such as handlebars, computers, seats, pedals, brakes and derailleurs are as likely to be stolen as the bicycle itself. Some key principles are listed below:

- Since bicycles are small and relatively easy to steal, bicycle parking should be located in highly visible locations such as within view of windows, parking fee collection booths, parking security guards or in areas of high pedestrian traffic.
- It is in the public interest to encourage bicycle use. Bicyclists should receive priority parking locations closer than cars to encourage cycling. Parking should be near the building entrances, rather than toward the side or the back of the building.
- Bicycle parking needs to look like bicycle parking and should be identified with a sign. The facilities should be easy to understand and use.
- Bicycle parking should not be placed next to car parking without adequate protection, thereby reducing the potential for bicycles and bike racks being damaged by cars.
- The most preferred parking is protected from the weather.
- Bicycle parking facilities should not be charged a fee where motor vehicle parking is free. When a fee is assessed, it should be significantly lower than the cost of car parking in order to encourage bicycle use.
- In high pedestrian use areas, sidewalk bike parking should be supplemented with high visibility, on-street bike parking facilities.

### Class I Parking Facilities

These facilities provide the highest level of security, protecting against theft of the entire bicycle, its components and accessories, and protecting the bicycle from inclement weather. The following facilities are types of Class I facilities:

- Inside a Building. A bicyclist may take the bicycle inside the building where it can constantly be observed. A locked room with restricted access to a small number of bicycles can also serve as a Class I facility, though it should provide Class II or Class III parking inside the room due to the shared nature of the facility.
- Bicycle Parking Cage. This is normally a steel or wood frame open structure with side and a top of chain link fence or expanded sheet steel. The interior of the parking cage can accommodate Class II or Class III parking racks. A bicyclist must obtain a key to enter the parking cage. If the cage is not inside a building, it should have a solid roof to protect bicycles from the weather.
- Lockers. A locker is a fully-enclosed space accessible only to the owner or operator of the bicycle. This type of facility is useful where the bicycle is left



unattended for an extended period of time.

- Check-in. With a check-in parking system, the bicycle is delivered to and left with attendants with provision for identifying the owner of the bicycle. The stored bicycles are accessible only to the attendants.

One such example of a check-in facility is the bikestation®, which provides 24-hour access to secure parking for a small annual fee. Bikestations also offer other services and amenities at some of their locations including bicycle repairs, retail accessories, bicycle rentals or loaners, personal lockers, restrooms, changing rooms, showers, transit and bicycling information and/or ticket sales, bicycle tours, free air and self-repair stand, water fountain, and bicycling programs, including bike-on-bus and bike lost and found.

## **Class II Parking Facilities**

Class II parking consists of a stationary rack that secures both wheels and the frame of the bicycle, requiring the bicycle to only provide a standard U-shaped lock. The lock is further protected by an enclosure to prevent it from being cut. The rack should support the bicycle in a stable position by providing support at both wheels and the frame, or leaning it on its kickstand or a post or wall. Class II facilities are most effective in off-street, limited pedestrian use areas.

## **Class III Parking Facilities**

These facilities provide a stationary object upon which a bicycle frame may be secured with the standard U-shaped lock. The design should reasonably safeguard the bicycle frame and wheel from damage if accidentally pushed.



## **Unacceptable Bicycle Parking**

Parking is unacceptable if it does not allow the frame to be easily locked with a standard U-shaped lock. Examples of unacceptable parking include all traditional wheel holder bike racks. Often these racks are designed to hold only one wheel of the bicycle, which can result in damage to the bicycle if it is accidentally pushed (giving them their unofficial name as a “wheel-bender” rack).



## **Bicycle Parking Recommendations**

Action: Update City Resolution no. 81-74, which establishes guidelines for bicycle parking facilities in conjunction with new construction within the city to reflect current bicycle parking standards, including updating the definition of acceptable bicycle racks within the City.

Action: Continue the existing public bicycle parking program as funding allows. Bike racks and lockers should be provided at public destinations, including the Downtown and all other major shopping districts, park-and-ride lots, public tenant access points, centers of employment, transit facilities, train stations, heavily-used bus stops, community centers, City Parks, and schools. All bicycle parking should be in a safe, secure, covered area (if

possible). Commuter locations should provide secure indoor parking, covered bicycle corrals, or bicycle lockers. A program to fund and install these facilities could begin as a joint-agency project between the City of Ventura and the Ventura County Transportation Commission.

- Action: Develop a special program to construct bicycle corrals where they may not be already provided at elementary, middle, and high schools should be suggested to the school district. These simple enclosed facilities are locked from the beginning to the end of school, and address the theft and vandalism concerns of students.
- Action: Develop bicycle parking guidelines for developers and property managers to assist in the provision of high quality bicycle parking facilities.
- Action: Bicycle parking should be audited yearly to determine if adequate parking is provided and if the level of security is sufficient.

### **8.3 Showers and Changing Facilities**

Shower and changing facilities are available in many bicycle-friendly communities throughout the country. They encourage commuting to work by providing a place for cyclists to change and get cleaned up after a long ride. Shower facilities should be large enough to provide separate facilities for both male and female riders where possible.

#### **Shower and Changing Facilities Recommendations**

- Action: Include showers and locker room facilities in new public building projects to set a good example for the private sector.
- Action: Encourage and provide incentives for developers, building owners, and employers to provide shower and locker room facilities for employees
- Action: Work with health and fitness clubs in and around employment centers to provide low-cost access to shower facilities for bicyclists.

## 9.0 Maintenance

The recommendations of the Bicycle Master Plan are subject to change as the needs of San Buenaventura change. A regular maintenance plan is necessary to ensure that the bikeway facilities are preserved in a usable condition. Police presence to provide security and enforcement along the bikeway network will also provide safer overall bicycling conditions. Finally, careful monitoring of collisions, providing easy access by the public to hotlines and website comment forms will help the City to assess and prioritize conditions for bicycling and evaluate changes to the bikeway network that could be implemented in conjunction with regularly scheduled maintenance activities.



### 9.1 Maintenance

Proper maintenance of both off-street and on-street riding surfaces is a key factor in bicycle safety. Debris and potholes, which may cause minor inconvenience to cars, are safety hazards which can cause a bicyclist to lose control or flip. Cyclists may also swerve out into the street in order to avoid roadway features, including rumble strips, raised end line markings, and certain types of storm drains, thereby creating a hazardous condition for the cyclists. Construction along bikeways can create additional obstructions to bicyclists if preventative measures are not taken.

**Action:** Establish a mechanism to provide cyclists a routine channel for notifying the City of hazards and problems to be addressed by maintenance. This program should improve easier access to and knowledge of the current notification systems both telephone and an online form available on the City's website. The City will evaluate ways to make the existing channels more effective and accessible including a program of sharing information with adjacent agencies where appropriate.

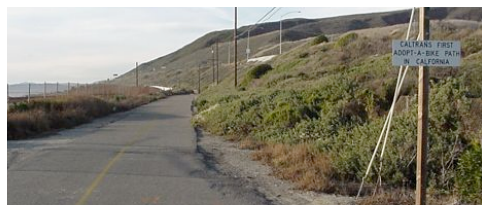


**Action:** Assign responsibility for ongoing maintenance for each bicycle facility prior to its construction or official designation. This level of maintenance should consist of, but not limited to, regular sweeping (especially after major storms), removal of encroaching vegetation, and maintenance of all signs and bicycle markings as funding allows. Furthermore, bikeways should be checked for debris and damage following adverse events such as a windstorm or major rainfall.



**Action:** Annually inspect bicycle facilities annually to identify maintenance needs. Inspection of all on-street facilities, including signs and markings, will be done at least annually. Scheduling of repairs for any deficiencies will take place at this time.

**Action:** Develop an "Adopt-a-Bikeway" program to improve maintenance. This may consist of funding for regular maintenance activities and/or community involvement





in helping to maintain clean facilities along a stretch of bikeway.

**Action:** Review all development and infrastructure improvement plans to ensure that bikeway recommendations are implemented, developer requirements are met, and design standards are adhered to in accordance with this Bicycle Master Plan. This includes ensuring that appropriate driveway sight distance provides adequate visibility to see bicycles riding on sidewalks.

In addition to these maintenance programs, efforts should be taken to prevent accelerated bike path degradation. Two major contributing factors to path degradation is the use of maintenance and construction vehicles on bike paths and excessive watering.

**Action:** Minimize the use of full-sized motor vehicles on bicycle paths. Smaller sized vehicles such as the electric “golf cart” or “Cushman” type vehicles should be used whenever possible. Policies should be developed to only allow emergency vehicles and other vehicles servicing the bike path to be allowed on the path. Indiscriminate use of the bicycle paths by city vehicles should be prohibited.



**Action:** The City should examine its watering practices near bicycle paths. Over-watering the paths, especially if heavy vehicles are driving on the paths, accelerates deterioration.

## **9.2 Roadway Maintenance Activities that Affect Bicycling**

There are a variety of regular roadway maintenance activities, some of which enhance bicycling, some of which are a detriment to it. When maintenance personnel are made aware how these activities can affect bicycling, they can take actions to preserve or enhance cycling conditions. This can often be done at little extra cost.

Pavement improvement projects designed to improve conditions on the roadway can potentially leave hazardous conditions for bicyclists who utilize the shoulders of the roadway. Oiling and chip sealing will sometimes cover part of the shoulder area leaving a ragged edge or ridge in the shoulder which creates a hazard for bicyclists as they attempt to navigate the uneven surface. When patching is done, loose asphalt materials often end up on the shoulder, where larger particles adhere to the surface leaving rough spots on the pavement. Sometimes very smooth pavement patching is done with a road grader; however, the final pass of the grader can leave a rough tire mark in the middle of the shoulder, creating difficult riding conditions for bicyclists.

**Action:** Ensure that roadway pavement maintenance does not negatively affect bicyclists’ ability to use the road. Maintenance crews should take special care to ensure that the shoulder and/or bike lane stays in good condition when the roadway is repaired. For instance, when doing a maintenance project, it is recommended that to cover the entire shoulder or bike lane area with a well-rolled, fine-textured material. When patching the pavement surface, excess asphalt materials should be swept off of the shoulder before they have a chance to adhere to the shoulder pavement. If a road grader is being used to smooth pavement, smooth grader tires should be used, or the shoulder area should be well-rolled after the last pass of the grader. When applying gravel shoulder backing materials at the edge of the roadway, the roadway should be swept approximately one week after the completion of the project to remove any excess gravel that is kicked up onto the roadway surface.

After roadway pavement improvements are made, they generally must be restriped. This is the ideal time to improve existing Class II bike lanes or to implement new ones at a low cost.

Action: All roadway maintenance and capital projects that will affect or require re-striping shall be examined by the City's bicycle coordinator for the possibilities of improving existing bike lanes or adding new bike lanes. This would institutionalize Action 4.23 of the General Plan.

It is often necessary to adjust or replace catch basins to improve drainage or ride smoothness. A bicycle-safe drainage grate at the proper height greatly improves bicycle safety. Some small asphalt dams are constructed on roadway shoulders to divert storm water into catch basins. Asphalt dams, low catch basin grates, and drains with grates parallel to the road all present hazards to cyclists.

Action: Improve storm drains around the City to include bicycle-friendly grates that are on-level with the pavement. Future drainage projects should adhere to guidelines as given by the American Association of State Highway and Transportation Officials (AASHTO). This shall be instituted by updating the City's Standard Plans and Engineering Design Standards.

Raised pavement features such as edge line pavement markers and rumble strips are potentially hazardous to bicycles.

Action: Ensure that any vertical interruptions in the roadway surface adhere to the maximum tolerances set forth in the Caltrans Highway Design Manual. These are for grooves (indentations) or steps (ridges). These tolerances should be maintained on all roadways at such locations as utility covers, driveway lips, where two pavements intersect, and other such joints in the area where bicyclists can be expected to ride.

Construction is an inevitable part of City growth. Roadway construction should include steps to prevent added risk to bicyclists from debris and reduced roadway space. Barricades for construction often obstruct bicycle travel. Steel plates over excavation sites are dangerous for cyclists.

Action: Develop and implement construction site policies and standards to ensure that bikeways remain usable during ongoing construction work. For example, during construction bikeways should not be used for storage of equipment, vehicles or access. Roadway or trail surfaces affected by construction should be returned to its preconstruction condition or better. Identification and signing of on-street detour routes should be implemented when it is necessary to close a bike route for construction.





## 10.0 Monitoring

The recommendations made in this Bicycle Master Plan are not static and are subject to change as conditions and demands change. Monitoring conditions along the bikeway network allows the City to periodically reassess the needs of the bikeway facilities system and adjust its recommendations accordingly. Incident monitoring allows the City to determine problematic locations along the bicycle facilities system and respond with increased enforcement or other mitigation measures where appropriate. Updating the Bicycle Demand Index on a regular basis will help the City to determine priority projects as this Plan is implemented.

### 10.1 Collision Monitoring

Collisions are an unfortunate element of any transportation system. Monitoring bicycle-related incidents is crucial to improving bicycling safety in Ventura. Careful incident monitoring can help identify problem areas that are especially dangerous for cyclists. Improvements to bicycle-related incident recording are needed. Currently police reports are virtually the only source of information for bicycle accidents. Improving the data recorded on these accident reports, along with finding additional methods of collecting accident reports, will provide the essential level of detail needed to assess the circumstances of the City's accident patterns and evaluate any mitigation steps that can be taken to improve safety.

**Action:** Collisions involving bicycles should be reported with at least the same degree of information as motor vehicle accidents. This information includes location, directions of travel, speeds, extents of injury, and accident causes at a minimum. Police officers should be instructed to gather this information at accident scenes.

**Action:** 911 Numbered Location Signage can be installed along longer segments of bike paths to facilitate the reduction of emergency response times by providing an easy reference to a particular location. The numbered location can also be correlated to bike path distance measurements if desired.



**Action:** Identification of a Bicycle hotline and website submission mechanism for reporting minor bicycle collisions so bicyclists can report collisions not reported to the police via normal channels.

**Action:** Establish methods of retrieving collision reports from hospitals and other emergency care facilities.

**Action:** The Bicycle Coordinator shall, at least annually and prior to the development of the Capital Improvement and Operations budget, meet with the Police Department and maintenance representatives from to review bicycle collision data and public complaints/comments about biking conditions. This review will set priorities for enforcement, capital improvements, and maintenance for the upcoming year.

**Action:** Develop educational materials to assist cyclists involved in collisions. The City should work with the Police Department to develop materials to assist cyclists involved in collisions.

Studies in other jurisdictions have revealed higher injury rates for cyclists using off-road paths. This is due to several factors including: higher percentage of inexperienced cyclists, the presence of pedestrians, in-line

skaters, pets and other animals on paths, rules of the road are often ignored, paths aren't wide enough or have poor sightlines, and paths often don't identify the right-of-way. Often cyclists' injuries on off-road paths aren't reported since police databases only include collisions, which involve a motor vehicle.

Action: Investigate alternative methods for collecting collision information from off-road incidents. This could include providing a telephone number for cyclists to log the location and conditions of path injuries.

Once a problem location has been identified, possible mitigation measures include: widening the path or constructing a separate path for pedestrians, installing signage and pavement markings to identify proper position on the path or warn of potentially hazardous conditions (such as a steep grade or curve), and installing traffic signals to assist path/roadway crossings.

## 10.2 Usage Monitoring

Monitoring bicyclists' use of the bikeway system provides a mechanism for tracking bicycling trends over time and for evaluating the impact of projects, policies, and programs. Regular bicycle user counts should be conducted at least annually and it is recommended that they follow national practices. The National Bicycle and Pedestrian Documentation Project has developed a recommended methodology and provides surveys, count, and reporting forms which can be modified to meet the needs and interests of individual jurisdictions.

Action: Include before and after bicycle data collection on priority roadway projects

Action: Insert bicycle survey questions into any existing travel mode or City audit survey

Action: Include counting of bicyclists in City count programs. The counting of bicyclists during intersection turning movement counts can often be accomplished at little or no extra cost.

Action: Require counting of bicyclists in all traffic studies

Action: Count and report bicycle-on-transit trips for busses and trains.

## 10.3 Security and Enforcement

Security may be a concern for some cyclists along portions of the existing and proposed Class I bike paths within the City. Providing police presence along City roadway segments with Class II bike lanes or Class III bike routes is generally more easily accomplished than providing police presence along the bike paths. On City streets where parking is at a premium, vehicles parking in bike lanes can become a problem as bicycles are often forced into the adjacent, busier traffic lanes. The following actions are recommended to address these concerns.

Action: 911 Numbered Location Signage that can be installed along longer segments of bike paths will facilitate the reduction of emergency response times

Action: Increased enforcement of both motorist and bicyclist laws will serve as a mechanism to promote safer use of the roads by cyclists and motorists.



- Action: Additional parking enforcement resources are required to keep the bicycle lanes free of parked and stopped vehicles. The effectiveness of more stringent enforcement practices, including the towing of vehicles and higher fines, also needs to be examined.
- Action: Normal bike path hours of operation should be 6AM to 9PM, unless otherwise specified
- Action: Develop a strategy for reducing bicycle theft. The City, in cooperation with the Police Department, local retailers, and insurance companies, should research and develop a strategy for reducing bicycle theft. This should include training bicyclists on how to properly secure a bicycle to various bicycle parking facilities.

#### **10.4 Bicycle Demand Index Monitoring**

Bicycle Demand Index Monitoring is important to assist with the prioritization of recommended bicycle facility improvements during future updates of the bicycle master plan. The Bicycle Demand Index assesses potential bicycle demand along roadway segments based on built environment, proximity to destinations, demographics, and street permeability factors; and this bicycle demand index can change as the City grows and as new developments are constructed (both in and near the City). As the recommended bicycle facilities system is implemented over time, particularly with the construction of new roadway linkages used by bicyclists, the factors affecting the Bicycle Demand Index throughout the City will also change.

- Action: Develop a program for collecting bicycle use data. This can include use of existing traffic monitoring systems or through volunteer efforts.
- Action: Update the Bicycle Demand Index on a periodic basis as a tool to be used when reevaluating the prioritization of recommended bicycle facility improvement projects.

#### **10.5 Bicycle Compatibility Index Monitoring**

Bicycle Compatibility Index Monitoring is a method that can be used to identify how the City's overall bikeway network is improving over time, and is also important to assist with the prioritization of recommended bicycle facility improvements during future updates of this Bicycle Master Plan. The Bicycle Demand Index assesses the comfort level experience by cyclists on the City's bikeway network, and the bicycle compatibility index can also change along particular segments or reaches within the City's roadway system as bikeway facility improvements are implemented.

- Action: Update the Bicycle Compatibility Index on a periodic basis as a tool to be used to identify how the City's overall bikeway network is improving over time.
- Action: Update the Bicycle Compatibility Index on a periodic basis as a tool to be used when reevaluating the prioritization of recommended bicycle facility improvement projects.

## 11.0 Promoting and Encouraging Bicycle Travel

The recommended bikeway network and its support facilities also needs to be supplemented by education and encouragement programs which work to promote bicycling to large numbers of people.

### 11.1 Bicycle Safety Education Programs

Education is paramount to teaching both cyclists and motorists their rights, responsibilities, and how to share the road with each other. Education programs need to target a broad audience: school-age cyclists, adult cyclists, and adult motorists can each benefit from different educational programs that will make the streets safer for all.

Bicycle safety education is currently conducted intermittently with collaboration between the City, School District, and VCCool (a community based organization). The general program, which includes educational curriculum, and a Bike Rodeo focuses on safe riding skills.



#### 11.1.1 Education in Schools

Education to school-age riders is vital to keeping younger riders safe. Lack of education for bicyclists, especially younger students, is a leading cause of accidents. For example, the most common type of reported bicycle incident in California involves a younger person (between the ages of 8 and 16) riding on the wrong side of the road in the evening hours. Therefore, it is critical to educate young cyclists with material that will make them safer riders and serve them into adulthood.

Current bicycle education programs in schools are typically taught once a year to 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> graders. Curriculum is generally derived from established programs developed by groups such as the California State Automobile Association, and taught by members of the Police Department. Budget cuts, demands on students' time, and liability concerns limit the extent of bicycle education to school children.

**Action:** Establish a School Safety Committee program. The existing city sponsored school education programs should be expanded into a cooperative effort between the City and the School Districts, and supported by a secure, regular funding source. This Joint City/School District Safety Committee would consist of appointed parents, teachers, administrators, police, and Public Works staff that would be tasked with identifying problems and solutions, ensuring implementation, and submitting recommendations to the School Board or City Council.

Action: Develop an educational program with materials and curriculum to be implemented in Ventura schools. Education materials should promote the benefits of bicycling, the need to education and safety improvements, the most recent educational tools available (including the use of low-cost safety videos), and directives to parents on the proper school drop-off procedure for their children. On-bike training should be implemented on a regular basis in local schools. The curriculum should consistently teach the following messages:

- **Wear a helmet.** In the event of a bicycle crash, wearing a helmet reduces the risk of serious head injury by up to 85%. It could save your life.
- **Obey all traffic laws.** Bicyclists have the same rights, and therefore the same responsibilities, as motorists.
- **Look both ways before crossing the street**
- **Always ride with the flow of traffic**
- **Be predictable.** Always signal your intents.
- **Be visible.** Wear light-colored clothing and bright or reflective clothing and always use a front light and rear reflectors at night

Bicycle helmet subsidy-programs are available in California, and should be used to provide low-cost approved helmets for all school children who ride bicycles.

Children over the age of 12 should be encouraged to use on-street facilities instead of riding on sidewalks when appropriate, and should be taught how to ride safely on sidewalks. Students should be taught how to gauge their speeds and how to ride when pedestrians are present.

Action: Maintain a School Commute Route Improvement Plan. The City should continue to prepare and maintain its Suggested Route to School for each of the schools in the City. This document can be used to evaluate safety conditions on school commute corridors to determine if conditions are within acceptable bounds. This can be done using state or City incident data, surveys of parents on their school commute habits, surveys of students who walk or ride to school, and other sources. This document should be prepared by City staff in conjunction with the School District. The document should be reviewed on a periodic basis to update changing conditions. Maintain specific thresholds by which meaningful comparisons can be made.

Maintain a toolbox of measures that can be implemented by the school district and City to address safety problems. This document, called the School Area Traffic Safety Guidelines, may include maps of preferred school commute routes, warning signs, enhanced education, additional crossing guards, signal treatments (longer cycles, ped activated buttons, etc.), enhanced visibility at key locations (lighting, landscaping abatement), crosswalks, bike lanes, and other measures.

The following process is suggested by the Safe Routes to School Guide and is recommended for developing a Safe Routes to School (SRTS) Program for Ventura bicycle commuters:

1. **Bring together the right people.** Consider whether the SRTS program should be implemented at a single school, district-wide, or other level. Each has its own benefits; for example, a district-wide group could create policies that affect all the schools in the district while a school-specific group could tailor the plan with more specific details to benefit the school.

Look for existing groups where a SRTS program is a natural fit, such as a city or school safety committee, PTA, school site council, wellness council or a pedestrian and bicycle advisory board. If there are no appropriate groups to take on the issue, form an SRTS coalition consisting of

administrators and teachers from the school, parents and students, community members, and people from the city including those in the Public Works Department and Police Department.

2. **Hold a kick-off meeting** to create a vision and to generate next steps in the SRTS planning process. At this point members of the SRTS coalition may separate into committees based on their expertise and interests, including:
  - a. Mapping and information gathering committee. Obtains maps, collects information about where children live, the routes they take to school and the condition of the streets along the way.
  - b. Outreach committee. Collects input from parents, teachers and students, and publicizes the program to the school and community.
  - c. Education and encouragement activities committee. Works closely with school administration and teachers to put education and encouragement activities in place, gathers materials for activities and solicits donations for programming and prizes.
  - d. Enforcement and engineering committee. Develops recommendations for enforcement and engineering solutions. Works closely with local government and other resources to find funding and make improvements.
  - e. Traffic safety committee. Identifies unsafe drivers' behavior and develops an education campaign to increase awareness.
3. **Gather information and identify issues**. Collecting information can help to identify needed program elements and provide a means to measure the impact of the program later.

First, observe walking and bicycling conditions for students:

- a. Observe or map the routes that lead to the school and the routes that are utilized by students. This information can be gathered by parent and student input, a survey of parent and student community patterns, City Department of Public Works and Police Department input, and observations of actual commuting patterns.
- b. Collect traffic counts and speed and injury data to help identify driver-related safety issues. This includes determining the 85<sup>th</sup> percentile speed and whether it is significantly higher than the posted speed limit, and obtaining information on when the last speed survey was conducted to set the road's speed limit.
- c. Observe the parking lot and drop-off areas to determine what improvements can be made to student drop-off and pick-up locations.
- d. Collect information about the condition and availability of sidewalks and bike lanes near the school. Are the existing facilities adequate to serve students?
- e. Gather information on crosswalks along routes to school. Are there sufficient numbers of crosswalks? Are the crosswalks and pedestrians using them easily visible to motorists?
- f. Determine the major intersection crossings for routes to school. Intersections may need improvements such as crosswalks, traffic control devices like stop signs or signals, or may need a signal timing adjustment as determined by a City traffic engineer.
- g. Determine any intersections which may pose a problem for children attempting to walk or bike across them, such as those with free right turn lanes. Motorists may be looking for oncoming traffic instead of watching for pedestrians as they make their right turn.

Second, determine how many children walk or bike to school. The school may already have this information, or it can be gathered through parent or student surveys. Parent surveys can also be used to understand parents' attitudes towards walking or bicycling to school and identify barriers to walking and bicycling that need to be addressed.

4. **Identify solutions**. Solutions to issues identified by the group will include a combination of education, encouragement, engineering and enforcement strategies. Safety is the first consideration. If it is not safe for children to walk and bicycle to school, then they should only be encouraged after problems are addressed. Some problems will require engineering solutions; others may require education, encouragement, enforcement or a combination of strategies. Here the expertise of the different partners is especially valuable.

5. **Make a plan.** The SRTS plan does not need to be lengthy, but should include encouragement, enforcement, education, and engineering strategies; a time schedule for each part of these strategies; a map of the area covered by the plan; an explanation of how the program will be evaluated, and cost estimates. Strategies that can be implemented early will help the group feel successful and can build momentum and support for long-term activities. Critical issues should be prioritized in this plan.
6. **Fund the plan.** Parts of a SRTS program will cost very little money. For example, most International Walk to School Day coordinators say they spend less than \$100 on their events. There are many low-cost engineering solutions that can be put into place in a relatively short amount of time such as new signs or fresh paint on crosswalks. On the other hand, some changes, such as new sidewalk construction, may need large amounts of capital. There are several places to seek funding for SRTS program activities including:
  - Federal programs: SAFETEA-LU (including funds allocated to SRTS), Congestion Mitigation and Air Quality, Surface Transportation Program, Recreational Trail Program and others.
  - State SRTS programs.
  - Environmental and air quality funds.
  - Health and physical activity funds.
  - County and city funding.
  - Philanthropic organizations.
7. **Act on the plan.** Events such as a Walk-to-School Day or Bike-to-School Day can be implemented without major funding requirements and are a great way to publicize the SRTS program.
8. **Evaluate, make improvements, and keep moving.** After the program begins, careful monitoring will identify which strategies are increasing the number of children safely walking and bicycling to school. Adjustments and fine-tuning can maximize the effectiveness of the program. One simple evaluation measure is to re-count the number of walkers and bicyclists and compare this number to the findings in Step 3 (the baseline count).

#### *11.1.1 Adult Bicyclist Education*

Adult bicyclists fall into a variety of categories of riders. Some commute on a regular basis, others bicycle for recreation. Some feel comfortable riding on arterial streets while others prefer quieter paths and side streets. Each type of cyclist has their own needs for the bikeway system as well as education. Education and encouragement efforts must recognize this and tailor to a wide variety of adult cyclists.

An effective adult education program is more difficult to implement than a student education program since adults do not often group together as a captive audience as school children do. It is important to offer a wide range of opportunities for adult bicyclists to improve their knowledge and skills relating to bicycling. Important messages which should be consistently taught include:

- **Be Alert.** Watch for other motorists and bicyclists and sudden behavior changes. Also be aware of potential road hazards such as potholes and gravel.
- **Obey all traffic laws.** Bicyclists have the same rights and responsibilities as motorists.
- **Always ride with the flow of traffic.** Ride where motorists and others expect cyclists. Never ride against the flow of traffic.
- **Be predictable.** Signal your turns, do not weave in and out of traffic, and stay as far to the right as is practicable.



- **Be visible.** Wear light-colored clothing and bright or reflective clothing and always use a front light and rear reflectors at night
- **Wear a helmet.**
- **Stay off sidewalks, whenever possible.**
- **Do not drink alcohol and ride.**

Some suggested actions for improving adult bicyclist education in Ventura are:

- Action: Develop a “Share the Road” campaign where bicyclists and motorists publicly pledge to share the road.
- Action: Distribute informational brochures regarding bicycle safety, rights, and responsibilities to area bicycle shops and at public events.
- Action: Develop a public service campaign that targets cyclists with bicycle safety measures.
- Action: Train cyclists in bicycle security measures, such proper locking techniques.
- Action: Work with local bicycling groups who could provide training expertise to less-skilled riders, and lead organized bicycle training sessions, tours, and rides.

#### *11.1.2 Motorist Education*

A severe lack of motorist education creates potential bicyclist-motorist conflicts that could be avoided with the right education. For example, many motorists mistakenly believe that bicyclists do not have a right to ride in travel lanes and that they should be riding on sidewalks instead. Many motorists do not understand the concept of “sharing the road” with bicyclists.

Like adult bicyclists, motorists are a very large, dispersed group that can be difficult to educate on a large-scale basis. Unlike bicyclists, however, licensure requirements present an opportunity to educate motorists before they even get on the road. Some consistent messages that should be taught to motorists are:

- **Be alert.** Watch for bicyclists and sudden behavior changes, especially at intersections.
- **Obey all traffic laws.** A crash that would cause only minor damage between two motor vehicles is potentially fatal in a bicycle/motor vehicle collision.
- **Be predictable.** Signal turns well before an intersection. It is required by law, and bicyclists depend on these signals to judge how they should react.
- **Do not honk unless necessary.** Cyclists can see and hear motor vehicles. Honking unnecessarily can be unnerving to bicyclists.
- **Give room.** Cyclists have to react to many road hazards that a motorist may not see. Giving plenty of room allows cyclists to safely react to any obstacles that they might encounter.

- Action: Work for inclusion of motorist-bicyclist safety materials into defensive driving and driver’s education courses.
- Action: Send an official letter to the Department of Motor Vehicles recommending the inclusion of bicycle laws in the drivers license exam
- Action: Produce a brochure on motorist-bicyclist safety and laws for public distribution. Possibly work with utility companies to distribute these materials.
- Action: Create a “Share the Road” campaign to publicly work with both motorists and cyclists about reciprocal rights and responsibilities. As a part of this campaign, “Share the Road” signs should be installed along busier Class III bicycle routes.

## **11.2 Community and Employer Outreach Programs**

Community support is necessary to ensure implementation over time. Strategies for community involvement are important to ensure broad-based support, which is important in securing financial resources for implementation. Involving the private sector by raising its awareness of the benefits of bicycling can range from small incremental activities by non-profit groups to efforts by the largest employers in Ventura. Specific programs are described below:

### *11.2.1 Employer Incentives*

The City could offer incentives to employers to encourage them to promote bicycling among their employees. This could come in the form of air quality credits, lowered parking requirements, reduced traffic mitigation fees, or other means as appropriate. To qualify for these incentives, employers must encourage employee bicycle use. This can include providing parking and shower facilities, and offering incentives like allowing employees who bicycle more flexible arrival and departure times, and possibly arranging for other transportation during inclement weather.

### *11.2.2 Bicycle Lending Program*

The City can develop a bicycle lending program for employees throughout Ventura. Bicycles can be acquired new or through police auctions. They should be repaired, painted, and engraved with ID numbers, and then made available to employees free of charge. The bicycles themselves should be low-cost, heavy-duty bicycles that have minimal resale value. Employers' responsibilities would be limited to an annual maintenance inspection and repairs as necessary. The objective of this program is to encourage employees to bicycle to work as an alternative to using automobile, so additional employer incentives toward employees, as listed in the "Employer Incentives" section, may be needed. This type of program is already in use in other cities throughout the country, most notably Portland.

### *11.2.3 Bicycle Clunker and Parts Program, Bicycle Repair Program*

The bicycle clunker repair program ties directly into the previous program by obtaining broken or otherwise unwanted bicycles and restoring them to working condition. The program works with young people (ages 12-18) to train them on how to repair bicycles as part of a summer jobs training effort. Bicycles are an excellent medium to teach young people the fundamentals of mechanics, safety, and operation which can then be used to maintain their own bicycles or build on related interests. The program can be staffed by volunteers from local cycling organizations, with the seed money coming from a local private funding source. The bicycles can come from the unclaimed stolen bicycles from the Police Department or from donated bicycles. The program will need to qualify as a Section 501C(3) non-profit organization to offer tax deductions.

### *11.2.4 Community Adoption*

"Adopt-a-Bikeway" programs can allow local business, organizations, and communities to "adopt" a bikeway. Small signs located along the bikeway would acknowledge the contribution. Support would be in the form of an annual commitment to pay for the routine maintenance of the pathway, which in general costs about \$8,500 per mile. Additionally, communities that have adopted a bikeway can become involved in helping keep the pathway clear of large debris. Encouraging community involvement in the bikeway system will lead to increased interest in bicycling.

### *11.2.5 Bike Fairs and Races*



Bicycle fairs represent an excellent opportunity to promote bicycling. The City can team up with local businesses and members of the community to create a large-scale bike fair that can attract thousands of visitors. Portland, for example, hosts an annual “Pedalpalooza,” a two week bicycle festival with hundreds of events including bike-in movies, family rides, bike-repair workshops and more. Other events could include workshops for kids, short fun races for kids, and route tours lead by experienced cyclists that can guide less experienced cyclists in negotiating safely on city streets.

In addition to bicycle festivals, bike races and criterions are also a good way to attract attention to cycling. Events should have circuits geared toward all levels of riders in order to reach the maximum audience.

#### *11.2.6 Bike to Work, School, and other Locations Days*

The City could help promote local “Bike to Work” and “Bike to School” days in addition to national “Bike to Work” day. Additionally, the City could work with local businesses to promote biking to these establishments, possibly with coupons for free or discounted items or services. For example, local movie theaters could offer a discount to those who ride their bikes to the movies during the promotional period.



Schools may wish to create a high-profile contest to encourage students to replace one car trip a week with a bicycle trip.

#### *11.2.7 Nighttime Bicycling Safety Campaign*

The Nighttime Bicycling Safety Campaign should strive to promote safer bicycling practices after dark. As a part of this campaign, an effort should be made to increase distribution and use of bicycle lights. In other cities, light campaigns are generally conducted around daylight savings time in the fall when it becomes dark earlier. The City should consult with the local police department to study the existing use of lights by bicyclists at night. Based on these results, the City can then order an appropriate number of lights to be handed out by police as needed. Providing lights to bicyclists may possibly be implemented in combination with another promotional program. This program should also strive to include information on safe nighttime riding habits on other educational and informational bicycling material distributed throughout the City. This includes, but is not limited to, encouraging the use of lights, reflectors, and bright, reflective clothing.

#### *11.2.8 Encourage Bicycling Tourism*

Approximately 1.8 million visitors enjoy the city’s beaches, museums, harbor, and nearby Channel Islands National Park annually. Bicycle rentals are already available by beach. The City should work with the tourism industry to explore opportunities with other interest groups and agencies to promote bicycle tourism.

#### *11.2.9 Guaranteed Ride Home Program*

The Ventura County Transportation Commission sponsors a Guaranteed Ride Home program in case of emergencies for people working or training for a job within Ventura County. The City should request that the County extend this plan to include bicycle commuters who commute farther than would be reasonable to travel by foot

### *11.2.10 Information Dissemination Program*

The Information Dissemination Program should work to distribute free bicycling materials to the public. This should include producing a bicycle facilities map and website. The City should also work with online mapping services such as Google to develop the improved dissemination of web based bikeway network information. Additionally, the City should adopt an official logo to be used along bicycle routes, on the City's web site and on printed materials.

Action: Create a City website dedicated to bicycling in Ventura. The website should provide maps with current and future bicycling facilities. It should also provide information on bicycling programs within the City, including information on upcoming promotional activities such as a "Bike-to-Work Day", bike rodeos or races. The website should link to local resources such as bicycle clubs, service shops, and accident data, as well as county, state, and federal informational resources. An interactive form to submit general improvement suggestions or requests for repairs should be available. It may also be possible to implement an interactive trip-planner within the City's web site, which could suggest bicycle routes and/or intermodal routes.

Action: Create and distribute a bicycle facilities map, for free, at public locations. The map should also be made available on popular mapping websites such as Google Maps, MapQuest and others.

Action: Develop a Ventura Bikeway System logo for use on signs and other City-sponsored bicycling materials.

### *11.2.11 Bicycle Mentoring Program*

Work with local bicycling organizations to promote a bicycle mentoring program for bicyclists of all ages. This should include neighborhood ride-alongs with schoolchildren and longer tours across the City for less-experienced adult bicyclists. Mentors should teach mentees the rules of the road and safety considerations for bicycling on City streets. Mentors should also offer ride-alongs to assist new commuter cyclists attempting to determine their best riding routes between their home and workplace.

### *11.2.12 Bicycle Identification Program*

The City should work to establish a bicycle identification program to assist local law enforcement with returning lost and stolen bicycles to their rightful owners. Sections 39000-39011 of the California Vehicle Code (CVC) permits a jurisdictional licensing requirement to be established, and the City of Ventura has established a bicycle licensing program; however, this program requires a fee and is underutilized by City residents. Increased resident participation could be achieved with the development and promotion of a free-of-charge web-based bicycle identification program where bicycle owners and/or bicycle shop employees have the ability to log bicycle identification information into a secure database that is searchable by police agencies.

## 12.0 Funding Strategy

Various funding programs become available on an annual basis. Each of these funding sources has a different deadline throughout the year. Projects should be reviewed regularly and the best candidate project should be submitted with a grant application for each applicable funding source. Many funding sources require lead time to develop the application. Planning and scheduling of staff time and any required City approvals should be considered to ensure that grant deadlines are met.

There are a variety of potential funding sources ranging from local, regional, state, and federal funding programs that will provide funds for infrastructure and program improvements. The following list presents the major funding sources available to Ventura. Additional information regarding funding sources may be found in the Appendix.

### 12.1 Federal Funding Sources

#### *Federal Surface Transportation Policy and Planning Act of 2009*

The Federal Surface Transportation Policy and Planning Act of 2009 is the reauthorization bill for SAFETEA-LU and is the primary source of federal surface transportation funding. This bill is the fourth renewal of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), which set forth goals of improving intermodal transportation. The goals of the Federal Surface Transportation Policy and Planning Act of 2009 include increased total usage of public transportation, intercity passenger rail services, and non-motorized transportation on an annual basis. This Federal act will be reauthorized sometime during the next 2-3 years and will likely include funding for bicycle projects.

Specific non-transportation funding programs which may provide assistance in implementing the recommended bikeway network include Federal Lands Highway Funds, the Transportation, Community and System Preservation Program, Recreational Trails Program, and the Land and Water Conservation Fund.

#### *Federal Lands Highway Funds*

Federal Lands Highway Funds may be used to finance bicycle and pedestrian facilities in conjunction with roads and parkways at the discretion of the State to which the funds are given. Projects must be transportation-related and tied to a plan adopted by the State and Metropolitan Planning Organization. The funds may be used for planning and construction. At the time of this writing the reauthorization of the program has not been approved but is expected to provide similar funding and policies as the current plan. This program is expected to be reauthorized as part of the Federal Surface Transportation Policy and Planning Act of 2009.

#### *Transportation, Community and System Preservation Program*

The Transportation, Community and System Preservation Program is a comprehensive initiative of research and grants to investigate the relationships between transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve such relationships. States, metropolitan planning organizations, local governments, and tribal governments are eligible for discretionary grants to carry out eligible projects to integrate transportation, community, and system preservation plans and practices that:

- Improve the efficiency of the transportation system of the United States.
- Reduce environmental impacts of transportation.
- Reduce the need for costly future public infrastructure investments.
- Ensure efficient access to jobs, services, and centers of trade.

- Examine community development patterns and identify strategies to encourage private sector development patterns and investments that support these goals.

This program is part of the current SAFETEA-LU plan, which expires September 30, 2009. It is expected to be renewed with similar goals and available funding

#### *Recreational Trails Program*

The Recreational Trails Program (RTP) provides funds to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles. The RTP funds are distributed to the State, which ultimately has the power to distribute the funds to the city.

The application deadline for RTP funding is in October.

#### *Land and Water Conservation Fund*

The Land and Water Conservation Fund (LWCF) program provides matching grants to States and local governments for the acquisition and development of public outdoor recreation areas and facilities. The program is intended to create and maintain a nationwide legacy of high quality recreation areas and facilities and to stimulate non-federal investments in the protection and maintenance of recreation resources across the United States.

The application deadline is in March for local agencies, and applicants must fund the entire project, and will be reimbursed for 50% of costs. Property acquired or developed under the program must be retained in perpetuity for public recreational use.

#### *Rivers, Trails, and Conservation Assistance*

The National Park Service (NPS) program provides technical assistance (direct staff involvement) at the request of citizens, community groups and governments to establish and restore greenways, rivers, trails, watersheds and open space.

## **12.2 State Funding Sources**

#### *Transportation Development Act*

The Transportation Development Act (TDA) provides two major sources of funding for public transportation: the Local Transportation Fund (LTF) and the State Transit Assistance fund (STA). These funds are for the development and support of public transportation needs that exist in California and are allocated to areas of each county based on population, taxable sales and transit performance.

#### *Habitat Conservation Fund*

The Habitat Conservation Fund (HCF) Program allocates approximately \$2 million per year to the California Department of Parks and Recreation for grants to cities, counties, and districts to protect fish, wildlife, and native plant resources, to acquire or develop wildlife corridors and trails, and to provide for

nature interpretation and other programs which bring urban residents into park and wildlife areas. The HCF Program sunsets in FY 2019/2020.

#### *Bicycle Transportation Account (BTA)*

The Bicycle Transportation Account (BTA) provides state funds for city and county projects that improve safety and convenience for bicycle commuters. All projects must conform to Chapter 1000 of the Highway Design Manual. The BTA will pay a maximum of 90% for a project, and funding may not exceed 25% of the total amount given to the BTA for the fiscal year (the program had \$7.2 million for 2008).

#### *Safe Routes to School*

Safe Routes to School is an international movement that has taken hold in communities throughout the United States. The concept is to increase the number of children who walk or bicycle to school by funding projects that remove the barriers that currently prevent them from doing so. Those barriers include lack of infrastructure, unsafe infrastructure, lack of programs that promote walking and bicycling through education/encouragement programs aimed at children, parents, and the community.

There are two separate and distinct Safe Routes to School programs. One is the State-legislated Program referred to as SR2S and the other is the Federal Program referred to as SRTS. The SR2S Program is extended indefinitely by AB 57. The state program requires 10% local match for projects, and only infrastructure projects are eligible. The federal program is set to expire on September 30, 2009, but is expected to be renewed with similar provisions in the next Surface Transportation Policy Act.

#### *State Transportation Improvement Program (STIP)*

The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15<sup>th</sup> (odd years). Caltrans prepare the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years). Cities should work through their Regional Transportation Planning Agency, County Transportation Commission, or Metropolitan Planning Organization to nominate projects for inclusion in the STIP.

#### *Community Based Transportation Planning (CBTP)*

This Program is primarily used to seed planning activities that encourage smart growth and livable communities. It helps communities develop concepts or plans that promote efficient land use-transportation infrastructure investments, which address sustainable growth while maintaining community value and integrity. The CBTP grant program is competitive. The CBTP grant funds 80% of project cost, requiring 20% from the local grantee. CBTP grant funded projects should include innovative public and stakeholder participation in the planning and decision-making process. Each project should be a smart growth - livable community demonstration approach to collaborative planning. Completed CBTP products should contribute to positive local planning practice by influencing and integrating those products into the larger



regional or blueprint plan. CBTP projects should also set an example, and provide best practice planning solutions for communities statewide.

#### *Transportation Development Act Article 3*

The TDA provides funds as a percentage of the state sales tax for local transportation, as well as pedestrian and bicycle improvements. TDA funds may be used for the construction of paved trails, bridges, bike lanes and bike routes. Funds cannot be used for landscaping. The funds are distributed by local transportation agencies, such as the Ventura County Transportation Commission in Ventura County.

#### *Tire-Derived Product Grant Program*

The California Integrated Waste Management Board (CIWMB) offers the Tire-Derived Product (TDP) Grant Program to promote markets for recycled-content products derived from waste tires generated in California and decrease the adverse environmental impacts created by unlawful disposal and stockpiling of waste tires. The program offers a several categories of projects it funds. Most important to a bicycling program would be the program's funding for tire-derived product sidewalks and pathways.

### **12.3 Local and Regional Funding Sources**

At present, the city's primary source of funds for bikeways and trails are from gas tax, Air Quality Mitigation development fees (AQM), general fund allocations, park dedication fees, and grants. City gas tax and general funds can be allocated for specific projects or used as matching monies for grants offered by other agencies.

As the development or redevelopment process continues in Ventura, projects will be conditioned to install bikeways as part of their required street improvements or continue to dedicate linear parks/bikeways.

#### *Mello Roos*

Bike paths, lanes, and pedestrian facilities can be funded as part of a local assessment or benefit district. Defining the boundaries of the benefit district may be difficult unless the facility is part of a larger parks and recreation or public infrastructure program with broad community benefits and support.

#### *Ventura County Air Pollution Control District (VCAPCD)*

AB 434 funds are available for clean air transportation projects. These funds are distributed through the regional Air Pollution Control District.

#### *Other Sources of Labor and Funds*

Cost savings can be achieved by using alternative sources of labor such as community volunteer service and trail/bicycle groups. The California Conservation Corps (CCC) may offer an opportunity for State-funded implementation of the trail system with workers available for constructing trails and planting. CCC field crews are capable of trail maintenance and construction of low and moderate technical skill levels, with specialized trail crews to complete more highly skilled work. The CCC may require the project sponsor to pay for a portion of the work performed by CCC crews.

The private sector (clubs, landowners and individuals) can be an important source of funding and support for trails, landscaping and other amenities. The Bicycle Master Plan offers opportunities for granting easements or rights of way with tax advantages; for bicycling clubs, companies, land-owners or individuals

to make gifts of money or materials for bridges, bikeway sections, benches, etc.; or for work parties (scouting groups, other youth groups).

A number of foundations may also have money available for bikeway development. Contributions could be used in meeting the matching grant requirements of other funding sources.

#### *Bikes Belong Coalition*

The Bikes Belong Grants Program strives to put more people on bicycles more often by funding important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include bike paths, lanes, and routes, as well as bike parks, mountain bike trails, BMX facilities, and large-scale bicycle advocacy initiatives.

#### *Local Bike Clubs and Advocacy Groups*

There are several local bike clubs that have expressed a

#### *Citizen Involvement*

The City of Ventura can enlist the help of local citizens to implement the Select System of Bikeways. Active citizen organizations can help construct the bikeways/trails or perform periodic clean up and maintenance. Involving potential users in the design and provision of the Select system of Bikeways can reduce public costs and assure that the bikeways are important to the community, thus assisting in safety and maintenance.

Use of professional volunteers for specific projects may be considered as a separate additional method of financing. Local professionals such as architects, landscape architects, engineers, and developers may be prevailed upon to donate their services to design or develop specific facilities.

## 13.0 Implementation Strategy

The City should implement improvements to the City's bicycle facilities infrastructure and encourage the use and recognition of use of a bicycle as a viable transportation mode by institutionalizing bicycle transportation planning into all aspects of City government. In order to accomplish this goal, it will be important to designate a bicycle coordinator, identify bicycling representatives from each City department, and work with an ongoing Bicycle Focus Group consisting of the City's bicycle coordinator, City representatives, and members of local bicycling organizations. All of these entities will be responsible for working together to ensure that a sound project implementation process will be provided to complete the recommendations and action items identified in the Bicycle Master Plan.

Chapter 7 of this plan provides a near term (5-year) set of recommended projects. Many of these projects such as the Class III routes can be implemented without significant costs. The Class I and Class II projects will require funding through grants or will be combined with pavement rehabilitation projects to provide effective use of local funds. Other recommendations in this document that are programmatic in nature, such as updating the Municipal Code related to minimum bike parking standards, can and will be done with existing staffing within the near term period. Education programs will need to be completed with partnerships with the community, bicycle advocacy groups, the School District, and County Public Health in order to be implemented in an effective manner and low cost to the City.

### 13.1 Bicycle Coordinator

The City will designate a bicycle coordinator. This position may require at a minimum a few hours per week to as much as a full-time position. The minimum effort can be done with existing staffing and a full time position would need additional funding. A full-time or part-time position could be filled by hiring a new City employee or by procuring specialized consultant contract services. The coordinator will be responsible for overseeing that the interests of the Bicycle Master Plan are implemented throughout the City's departments and department sections, and for training City staff and consultants to implement the Bicycle Master Plan. Additionally, the coordinator will be in charge of organizing a Bicycle Focus Group for the City and will serve as the representative for the City on County bicycle committees. The more specific responsibilities of the bicycle coordinator will include:



- A. Plan and manage new programs in the areas of bicycling accommodations, safety, educational materials, enforcement materials, courses, and recreation.
- B. Assist in development of City and County bicycle facility plans.
- C. Develop bicycle safety and promotional information through printed materials, videos, TV spots, press releases, interviews, and promotional activities.
- D. Develop (or prepare) printed materials such as quarterly newsletters, maps showing bicycle routes and safety information, in addition to answering inquiries from citizens.
- E. Arrange for special displays at events including conferences, workshops, and other public and technical gatherings; and prepare informational presentations.
- F. Review and update the City's Bicycle Master Plan.

- G. Serve as principal contact with Federal, state and local agencies, the press, citizen organizations, and individuals on matters relating to bicycles.
- H. Coordinate and maintain bicycle program budget and forecast budgetary needs.
- I. Coordinate the review of bicycle facilities projects for conformity with design standards, the City's General Plan, and environmental processing requirements.
- J. Review legislative requirements and recommended changes in state law to facilitate maximum utilization of the bicycle for transportation purposes.
- K. Maintain current knowledge of sources of funding for implementing the Bicycle Master Plan.
- L. Work with appropriate departments to fully integrate bicycle projects in programming decisions.
- M. Serve as primary bicycle program liaison to all City departments.
- N. Work with appropriate City departments to develop priorities for special studies in areas such as:
  - 1. cause of Collisions
  - 2. locations of Collisions
  - 3. effectiveness of new facility designs
  - 4. needs analyses
  - 5. barrier removal analyses
  - 6. origin and destination surveys
- O. Monitor bicycle use, provide recommendations for system improvement and develop usage data.
- P. Ensure that important bicycling-related elements from the Bicycle Master Plan be included in updates to the City's General Plan and any area plans that are derived from the General Plan.
- Q. Prepare an annual report to be presented annually to the City Council on the achievements of the Plan and priorities for the upcoming year.

Prior to the establishment of a part-time or full-time bicycle coordinator position, the City's designated bicycle coordinator, or possibly a specialized consultant, should maintain primary responsibility for the implementation of the recommended bikeway system presented in this Bicycle Master Plan. Once the part-time or full-time bicycle coordinator position is established, the designated bicycle coordinator shall then assume responsibility for all aspects of implementing the Bicycle Master Plan.

### **13.2 City Department Bicycling Representatives**

A bicycling representative should be selected to represent each City department and section. This person should be interested in bicycling and willing to champion the idea of improving bicycling conditions in the City. Each department's representative should receive training from the City's bicycle coordinator and attend bicycling-related classes and seminars within their respective areas of expertise and responsibility. Each person should be responsible for reviewing all bicycling-related materials within their department or section, and for ensuring implementation of the Bicycle Master Plan goals and objectives as they relate to the responsibilities of their section. Furthermore, each department's representative should coordinate with other departments and sections for help in implementing the goals and objectives that fall outside of their areas of expertise, and be a member of the City's Bicycle Focus Group. Each representative should also work toward institutionalizing bicycle transportation considerations into all aspects of City government.

### **13.3 Bicycle Focus Group**

The City should maintain a Bicycle Focus Group (BFG) consisting of members of bicycling-related organizations, bicycling representatives from each City department and section, and the bicycle coordinator. With members of bicycling-related organizations on the BFG, the BFG will be available to mobilize the bicycling community to assist with the implementation of programs contained within the Bicycle Master Plan. The BFG's responsibilities should include reviewing updates to the Bicycle Master Plan, suggesting operational improvements to the City's bikeway system, assisting with the development of public awareness campaigns, helping with bicyclist education efforts, and supporting bicycling initiatives such as bike fairs and races which promote bicycling. The primary benefit of establishing and maintaining a BFG will be developing improved coordination between City departments and sections.

### **13.4 Bicycle Master Plan Implementation Process**

An effective project implementation process for completing all aspects of this Bicycle Master Plan will need to be coordinated through all appropriate departments and sections within the City. The responsibilities for each City department and section playing a primary role in implementing the recommendations of the Bicycle Master Plan are provided as follows:

#### *Public Works Department*

The Public Works Department is responsible for providing a wide variety of programs, services, and activities which improve quality of life for City residents. The Department is responsible for ensuring the implementation of the following items:

Review recommendations for shower and changing facilities and install them in public locations wherever feasible. [Chapter 8]

Improve access and knowledge of the bicycle hotline and website to submit minor accidents that occur on trails and bikeways that are not reported to police. [Chapter 10]

Work with the school district to review and implement bicycle education programs for schoolchildren. This should include distributing written educational materials, implementing a Safe Routes to School program, and working to ensure that children have access to helmets. [Chapter 11]

Work with community organizations and bicycle advocacy groups to implement an adult bicyclist education program geared toward adult bicyclists of all skill levels. This program should include working with local bicycling groups to provide training to less experienced riders, distribution of educational materials featuring safety, rights, and responsibilities of bicyclists, and a “Share the Road” campaign. [Chapter 11]

Work with community organizations and bicycle advocacy groups to develop and promote a motorist education program, which distributes educational materials, includes a “Share the Road” campaign, and aims to include bicycle laws in the defensive driving courses and the drivers-license exam. [Chapter 11]

Team up with local businesses and community organizations to host bike fairs and races in an effort to promote bicycling within the City. [Chapter 11]

Promote local “Bike to Work” and “Bike to School” days. Additionally, the City may wish to work with local businesses to promote biking to these establishments, possibly with incentives such as coupons or discounts on services. [Chapter 11]

Work with the tourism industry to explore opportunities with other interest groups and agencies to promote bicycle tourism. [Chapter 11]

Develop or support a community based bicycle clunker and parts program to teach young people how to work on bicycles as part of a summer job. This program ties directly into the bicycle lending program by obtaining broken or otherwise unwanted bicycles, possibly from donations or unclaimed stolen bicycles from the Police Department, and restoring them to working condition. [Chapter 11]

Implement an “Adopt-a-Bikeway” program to allow local business, organizations, and communities to “adopt” a bikeway. The adoption fee should cover the cost of routine maintenance and the program should encourage communities, which have adopted a bikeway to become involved in its maintenance. [Chapter 11]

Develop a bicycle light campaign to distribute lights to bicyclists. This campaign may possibly be implemented as part of another program. [Chapter 11]

Develop an official Ventura bikeway logo for use on the City's website, printed materials and signage.

### *Transportation Division*

The Transportation Division is responsible for engineering crosswalks, driveways, traffic control devices, and is responsible for engineering bikeway facilities as well as maintenance of signs, markings and bike parking facilities. The Division is responsible for ensuring the implementation of the following items:

Design bicycle-detecting loops at signalized intersections. [Chapter 7]

Develop solutions for constrained areas around the bikeway network. [Chapter 7]

Implement recommended signing and striping policies. Special attention should be paid to making sure that all roadway striping projects from the Design Section are reviewed for consideration of improving existing bike lanes or adding new bike lanes. [Chapter 7]

Implement recommended signing and striping procedures for sidewalk management. [Chapter 7]

Improve bicycle accommodations on public transit vehicles by increasing the number of available bike racks on busses and trains. [Chapter 8]

Measure the amount of bicycle-on-transit trips on a regular basis in order to keep track of demand for bicycle accommodations on public transit. [Chapter 8]

Update the City Bicycle Demand Index on a periodic basis. [Chapter 10]

Update the City Bicycle Compatibility Index on a periodic basis. [Chapter 10]

Follow Accident Monitoring recommendations to improve the quality of accident data, increase the levels of reporting, analyze the data, and develop solutions to decrease accidents throughout the City. [Chapter 10]

Develop a strategy, working with the Police Department, local businesses, and members of the community, to reduce bicycle theft. [Chapter 10]

Organize a maintenance program to provide routine maintenance and meet the needs of bicyclists by promptly responding to requests for maintenance. [Chapter 9]

Observe the recommendations made in the Roadway Activities that Affect Bicycling sections to ensure that bicycle facilities are kept safe, well-maintained, and well-preserved. [Chapter 9]

### *Capital Design Division*

The Design Division is responsible for designing new roadways for implementation. The Design Division should consult with the Transportation Division to ensure that bicycle facilities are included on newly designed roadways. The Division is responsible for ensuring the implementation of the following items:

Design new sidewalk paths to be consistent with Caltrans standards for Class I bicycle facilities.

Design roadways for busses and bicycles to co-exist safely as part of the Integration with Public Transit recommendations. [Chapter 8]

#### *Pavement Maintenance Section of the Design Division*

The Pavement Maintenance Section maintains 650 lane miles of streets and alleys, 2 million square feet of sidewalks, 350 miles of curbs and gutters, 15,000 road signs, and over 1 million linear feet of street markings by implementing long-term pavement maintenance projects. The Pavement Maintenance Section will be responsible for including bikeway facilities in its long-range planning efforts, as stated in the following items:

Include the addition of recommended Class II and class III bicycle facilities as part of the restriping required by scheduled maintenance. [Chapter 7]

Instruct maintenance crews to adhere to the recommendations listed under Roadway Maintenance Activities that Affect Bicycling. [Chapter 9]

#### *Parks Division*

The Parks Department is in charge of the design and maintenance of City parks and linear paths. Paths along linear parks are especially important to bicyclists as the lengthy trails can serve both recreational and utilitarian purposes. The Parks Division is responsible for ensuring the implementation of the following bicycling-related items:

Maintain existing sidewalk paths in a manner that provides a clear, clean path of travel.

The division should work with the Transportation Division, Capital Design Division, Ventura County Watershed Protection District, the County of Ventura and the State of California to negotiate joint use of rights of way along Barrancas, the Santa Clara and Ventura Rivers, the coastline, and in County unincorporated areas wherever such joint-use would not conflict with the activities of these jurisdictions. The joint-use could be administered through an agreement in which the City would take responsibility for and assume all costs of constructing, maintaining, and policing of bikeways located within the rights of way of these jurisdictions.

#### *Community Development Department*

The Community Development Department implements a variety of programs to assist in the development of the City's economic future and foster a better quality of life. The Community Development Department (CD) is responsible for planning and zoning, economic development and housing and redevelopment for the City of Ventura. Our department works to ensure that new construction and additions to existing structures meet the policies and guidelines that have been established for public safety, zoning and development. CD also works with various City commissions that help guide and advise the City Council regarding growth in the City. Many projects that come before the City for review are presented to one or more commissions or committees for recommendations to the City Council. The department is also involved with special events, regional planning, and open space. The Community Development Department is responsible for ensuring implementation of the following items:

In the long term, as land develops, the Community Development Department should continue to secure easements from private landowners. There are areas of the recommended bikeway network that are owned by quasi-public and private agencies (churches, schools, businesses, etc.), which could help complete the recommended bikeway network if public access is permitted.

Review new developments to ensure that adequate bicycle parking is provisioned in plans, as suggested in the Bicycle Parking Recommendations and that the required bicycle parking facilities that are required by the Municipal Code continue to be provided by development. [Chapter 8]



Develop incentives for designers to include shower and changing facilities in new projects.  
[Chapter 8]

Review new developments to ensure that appropriate driveway sight distance provides adequate visibility to see bicyclists. [Chapter 9]

### **13.5 Implementation Priorities**

Because there many capital improvement projects identified in this plan to improve bicycling in the City there should be a rational approach to prioritize staff and community efforts. The City Transportation Manager has the authority to set priorities for implementation of specific projects as needs arise. However, in order to plan in an orderly manner for implementation of this Plan and ensure that the needs of the community are being met, the following shall occur:

1. Annually, the Bicycle Coordinator shall meet with the Bicycle Focus Group and representatives from the Police Department, parks division and street/sign/signal maintenance sections to recommend priorities for the upcoming year. The following criteria should be used as a basis for setting the priority recommendations:
  - a. Bicycle Safety – Projects or programs that improve safety at a location that has a demonstrated collision history or would significantly decrease or remove a serious safety concerns. (20 pts)
  - b. High Use Demand – Areas of high demonstrated demand based on bicycle counts or high latent demand based on socioeconomic data, land use, and population density. (15 Pts)
  - c. Access or proximity to schools or youth gathering facilities. (15 pts)
  - d. Grant funding availability. (15)
  - e. Closes a gap in an existing key bike route or path. (15 pts)
  - f. Significant improvement to bicycle compatibility index within a community area as demonstrated in the City’s Bicycle Compatibility Index model (10 pts)
  - g. Provides a bicycle facility along a high traffic volume corridor. (10 pts)
  - h. Is located in a highly visible location that will increase bicycle acceptance and culture change. (10 pts)
2. The City Transportation Manager will review the recommended priorities and consider their incorporation into the proposed Capital Improvement Project Plan and Operations budget as funding allows. The recommended priorities do not preempt the ability of the Transportation Manager to change priorities or funding as new significant safety or liability issues become apparent or grant funding becomes available.

### **13.6 Bottom Line to Successful Implementation**

This Bicycle Master Plan is nothing more than a placeholder on a dusty bookshelf if bicycling improvement thought processes are not integrated into day-to-day activities within the City. Actions to Institutionalize Bicycling Considerations must be integrated into all aspects of City government. Institutionalizing Bicycling Considerations within all City Departments is a key component for this Bicycle Master Plan to be successful.

With any project, activity or day-to-day task that could in any way mildly impact bicycling conditions within the City, each City elected official and each City staff member must ask himself or herself:

**“How can I make conditions better for bicycling?”**

And each City elected official and each City staff member must then take action to make an improvement.

## **APPENDIX A**

**City Council Adoption  
Resolution 2011-019**

**RESOLUTION NO. 2011-019**

**A RESOLUTION OF THE COUNCIL OF THE  
CITY OF SAN BUENAVENTURA ADOPTING  
THE 2011 BICYCLE MASTER PLAN DATED  
MARCH 2011**

WHEREAS, bicycles provide an important role in providing a viable transportation alternative to the Citizens of the City of San Buenaventura; and

WHEREAS, the City Council supports programs which will promote and improve bicycle safety and increased bicycle usage; and

WHEREAS, the Bicycle Master Plan ("Plan") is consistent with the goals of the City's 2005 General Plan; and

WHEREAS, the Plan will promote bicycle safety within the City; and

WHEREAS, the Plan has a statutory exemption from the California Environmental Quality Act (CEQA) per California Public Resources Code Section 21083.3 (a); and

WHEREAS, the City of San Buenaventura Bicycle Master Plan complies with the California State Bikeways Laws and Plan requirements (Section 891.2 of the Streets and Highways Code); and

WHEREAS, the Plan is required for eligibility for funding by the State of California Bicycle Transportation Act (BTA).

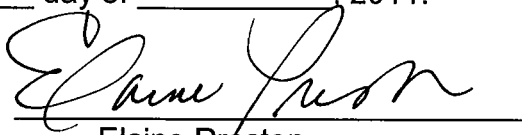
**BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SAN BUENAVENTURA AS FOLLOWS:**

**SECTION 1.** The City Council hereby adopts the City of San Buenaventura Bicycle Master Plan.

**SECTION 2.** The City Council hereby authorizes the City Manager, or his designee, to execute, in the name of the City of San Buenaventura, all necessary documents to implement and carry out the purpose of this resolution.

SECTION 3: This Resolution will become effective immediately upon adoption.

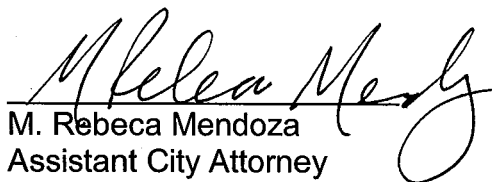
PASSED AND ADOPTED this 2nd day of MAY, 2011.

A handwritten signature in cursive script, appearing to read "Elaine Preston", written over a horizontal line.

Elaine Preston  
Acting City Clerk

APPROVED AS TO FORM  
Arial Pierre Calonne, City Attorney

By:

A handwritten signature in cursive script, appearing to read "M. Rebeca Mendoza", written over a horizontal line.

M. Rebeca Mendoza  
Assistant City Attorney

STATE OF CALIFORNIA                    )  
COUNTY OF VENTURA                 ) ss  
CITY OF SAN BUENAVENTURA         )

I, Sara A. Carver, Deputy City Clerk of the City of San Buenaventura, California, certify that the foregoing Resolution was passed and adopted by the City Council of the City of San Buenaventura at a regular meeting on May 2, 2011, by the following vote:

AYES:       Councilmembers Brennan, Weir, Morehouse, Andrews,  
              Monahan, Deputy Mayor Tracy and Mayor Fulton.

NOES:       None.

ABSENT:     None.

WITNESS WHEREOF, I have set my hand and affixed the seal of the City of San Buenaventura on May 3, 2011.

  
Deputy City Clerk

